THE JAPAN MAGAZINE

APRIL 1911

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THE JAPAN MAGAZINE

A REPRESENTATIVE MONTHLY OF THINGS JAPANESE

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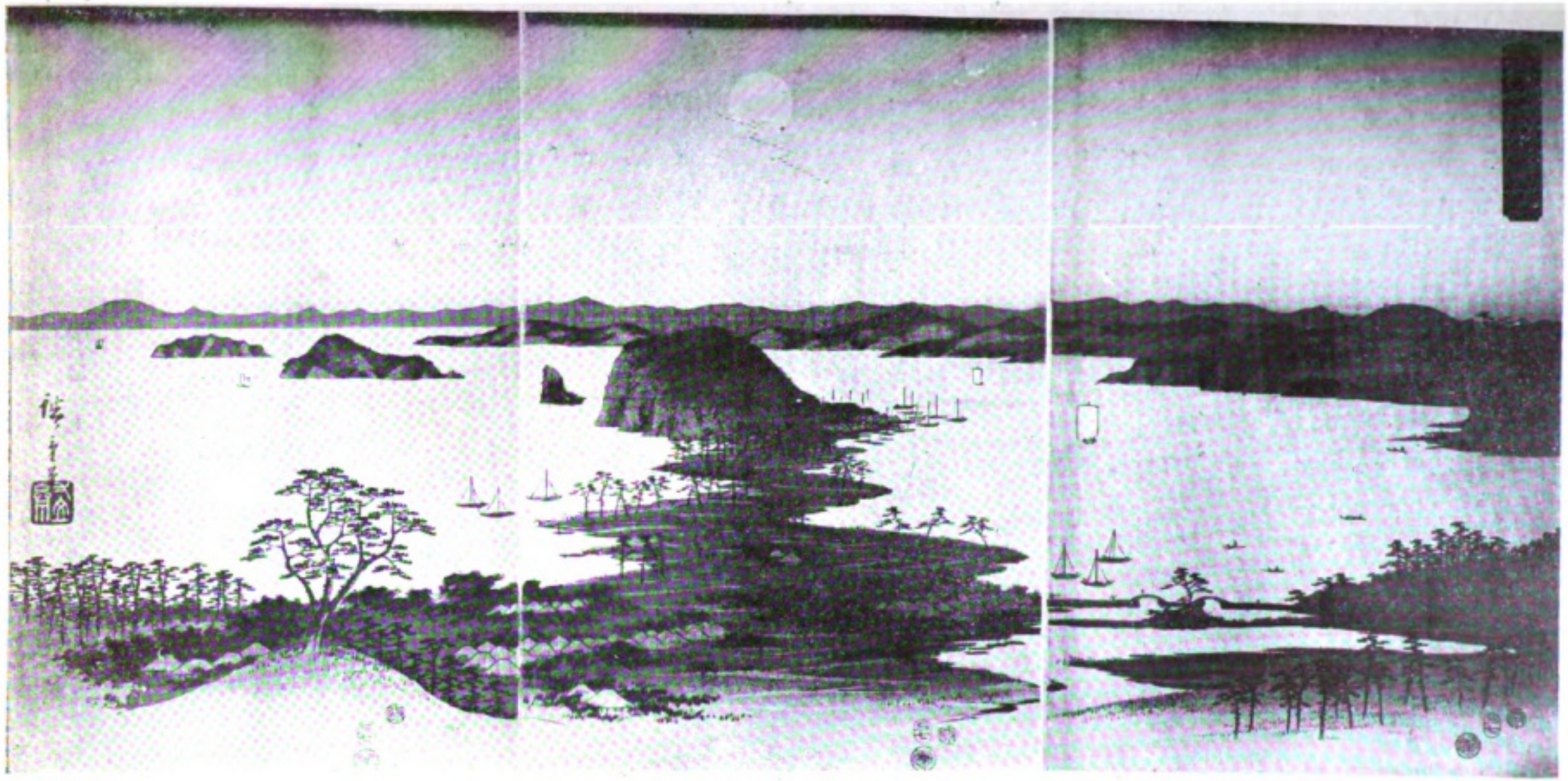

"MOONLIGHT AT KANAZAWA," BY HIROSHIGE II.

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THE JAPAN MAGAZINE

VOLUME ONE APRIL 1911 NUMBER TWELVE

THE IMPERIAL DIET

AT the time of the Meiji Restoration the Tokugawa Shogunate was overthrown, and the Mikado at Kyoto, who had for centuries been a sovereign in name only, was again vested with the real power of government, and Japan experienced a great social and political revolution. The re-established Imperial Government was gradually modelled after the most advanced systems of Europe.

In the course of years there arose a group of politicians who advocated the grant of popular voice in the government of the country, and a memorial was presented to the throne, and a movement set up among the people toward the realization of their object. These politicians eventually organized themselves into a party, the *Jiyuto*, or Liberal Party (1878), the leader and soul of which was Itagaki Taisuke, subsequently created a count.

The Government did not then regard the people as ready for a voice in its affairs and it was not until February 11, 1889, a day celebrated throughout the land as the anniversary of the accession of Emperor Jimmu, the first heaven-descended ruler, that the constitution which granted the common people the right to participate in the government was promulgated.

Japan may well be proud that this critical period of her history was passed through amidst peace and rejoicings, offering to the world a unique example, for even in those countries of the Occident which pride themselves upon their advanced civilization, such a political revolution as the grant of the right of legislation, has been accomplished only as a result of armed conflict between the throne and the people.

On the first of July, 1890, a general election for members of parliament was held throughout the country, a great event in national history, and several days later the three hundred members elected reported to the central Government.

On the twenty-ninth of November of the same year, His Majesty the Emperor paid his respects to the spirits of the Imperial ancestors at the Koreiden, sanctuary of the Imperial Palace, and reported to them concerning the opening of the Diet which was to take place on that day, and the presidents and vice-presidents and members of both Houses were allowed by special Imperial permission, to visit the Koreiden to pay

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respect to the Imperial ancestral spirits, after which His Majesty proceeded in full state to perform the ceremony of opening the first session of the Diet, in the House of Peers.

The Cabinet was presided over by Count (now Prince) Yamagata, the opposition benches being filled by members of the Progression Party (*Kaishinto*) led by Count Okuma, and the Liberals (*Jiyuto*) led by Count Itagaki; and their united opposition against the men in power at the time was most bitter and intense.

Among the prominent members of the *Kaishinto* were Ozaki Yukio, Inugai Ki, Shimada Saburo, Komuchi Taketomi and in the front ranks of the *Jiyuto* were Sugita Tenchi, Matsuda Masahisa and Hoshi Toru; and a host of others on both sides.

Since then both Houses have experienced many vicissitudes; the Diet was suspended on numerous occasions, and at one time a purely party government was formed, with the leaders Okuma and Itagaki.

The last session was the twenty-seventh, and the two great political parties at present are the *Seiyukai*, or Association of Political Friends, which includes the former *Jiyuto* members, and the *Kokuminto*, or Nationalists, drawing its forces from the former *Kaishinto*.

The Imperial Diet of Japan has its power assigned by the Constitution of the Empire, and is composed of the House of Peers (*Kisoku-in*) and the House of Representatives (*Shugi-in*). The House of Peers is composed of members of the Imperial family, the aristocracy, and life members appointed by the Emperor in accordance with the regulations for the House of Peers. The House of Representatives is made up of members elected by the people in accordance with the provision for the Election Law.

Rank among Peers is noted as follows: Members of Imperial family; princes, marquises; counts, viscounts and barons; those specially appointed by the Emperor for valuable service rendered the State or for distinguished learning; members, elected by vote, from the highest tax payers among agriculturists, industrialists and commercial men in each prefecture.

Members of the Imperial family who are of age have a right to a seat in the House of Peers for life, as have also members of the aristocracy of the ranks of prince and marquis, who have attained the age of twenty-five years; those of the rank of a count, viscount or baron of twenty-five years of age may be elected by a majority of members of the aristocracy of the same rank, for a term of seven years, the number of such peers not to exceed one fifth the number of peers of respective rank. Members appointed by the Emperor must be thirty years old and are made life members. The members from among highest tax payers must be thirty years of age and their term of service is seven years, and their number, together with specially appointed members, must not exceed the number of members from the aristocracy.

The president and vice-president of the House of Peers are appointed by the Emperor from among the members, to serve a term of seven years. The first president of the House of Peers was the late Prince Ito, and the first vice-president, Count Higashikuze.

Members of the House of Representatives are elected from districts over which governors of prefectures have superintendence, and the mayor of the city in which an election is held acts as chief of the election.

Universal suffrage has not yet been adopted, the qualifications of an elector being as follows: he must be a male subject of the Japanese Empire, who has attained the age of twenty-five, resided in the district in which he may vote for at least one year, and must have paid direct national tax to the amount of seven dollars and a half for the same length of time. Foreigners who have been naturalized are granted the same rights as those enjoyed by native subjects.

To become a candidate for election to the House of Representatives the following qualifications are necessary: he must be a Japanese male subject at least thirty years old, paying a direct national tax exceeding seven dollars and a half.

Those ineligible either as electors or candidates are: Government officials in the Imperial Household Department, Auditing Bureau, Revenue or Police Departments; bankrupts who have not paid their liabilities; criminals under three years after the expiration of their term of imprisonment or date of pardon;

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HOUSE OF PEERS

HOUSE OF REPRESENTATIVES

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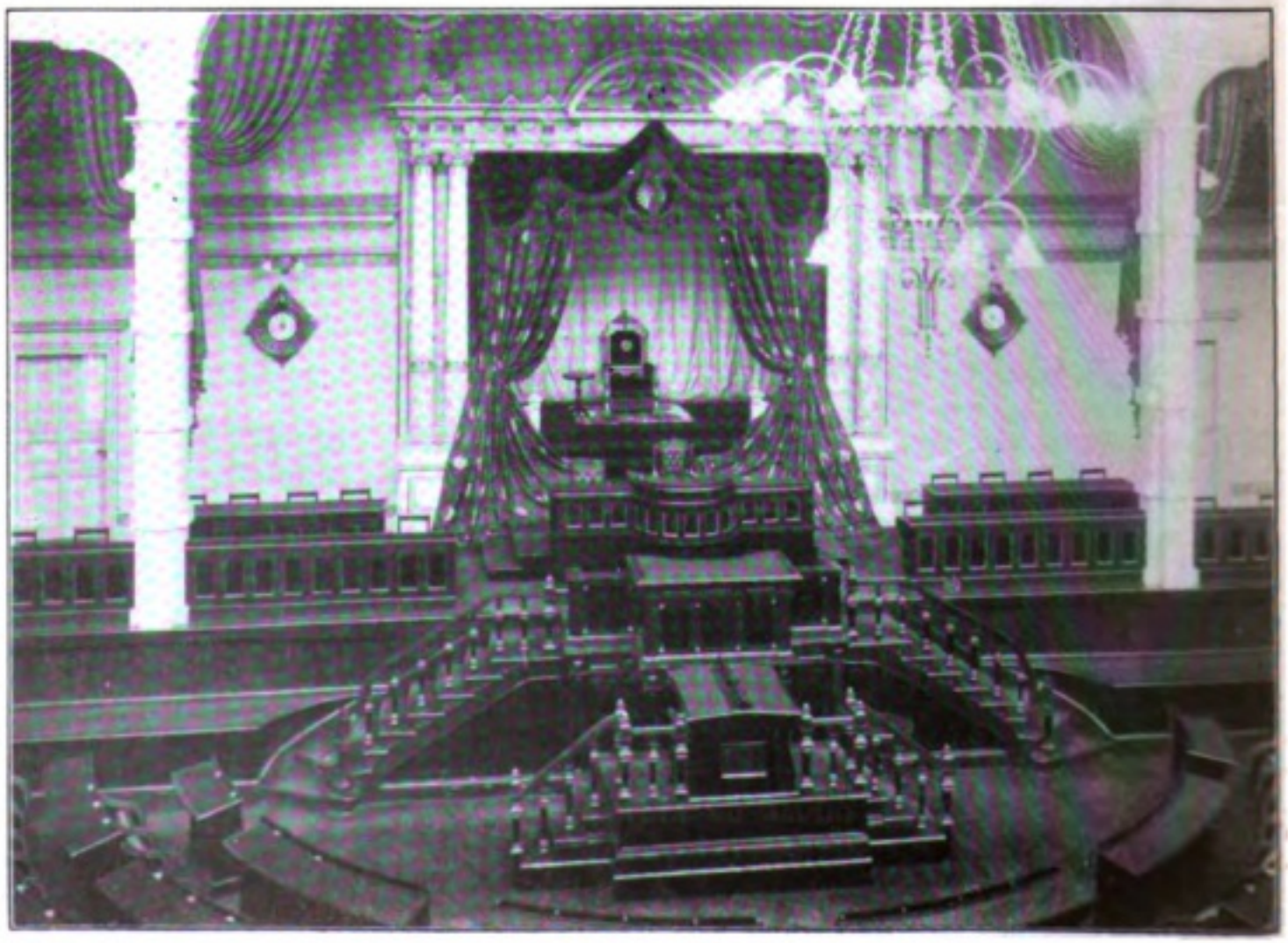
PRINCE TOKUGAWA

PRESIDENT HOUSE OF PEERS

HON. SUMITAKA HASEBA

PRESIDENT HOUSE OF REPRESENTATIVES



THRONE, INTERIOR HOUSE OF P. ERS

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and any who have been deprived of or suspended from their public rights.

A register of electors is taken in each electoral district annually on the first of April, by the headman of each village and town, and filed not later than the fifteenth of the same month. Ordinarily elections take place the first of July, those candidates receiving the greatest number of votes becoming members; in case of a tie, the senior candidate is given the preference, and should any two with an equal number of votes happen to be the same age, the decision is made by casting lots. The successful candidate's name is reported to the Minister of Interior by the governor of the prefecture.

The term of service in the House of Representatives is four years, and a member is eligible to re-election at the expiration of his term. The president and vice-president of the House of Representatives are chosen by the Emperor from among three candidates elected by the House; but it has become a precedent that the one receiving the greatest number of votes is chosen. At the first session of the Diet, the House of Representatives had for its president Nakashima Nobuyuki, and for vice-president, Tsuda Shindo.

The following extracts from the Constitution of Japan relating to the subject under consideration give direct information:

The Emperor is sacred and inviolable.

The Emperor exercises the legistative power with the consent of the Imperial Diet. The Emperor gives sanction to laws and orders them to be promulgated and executed. The Emperor convokes the Imperial Diet, opens, closes and prorogues it, and dissolves the House of Representatives. The Emperor, in consequence of an urgent necessity to maintain public safety or to avert public calamities issues, when the Imperial Diet is not sitting, Imperial Ordinances in the place of law. Such Imperial Ordinances are to be laid before the Imperial Diet at its next session and when the Diet does not approve the said ordinances, the Government shall declare them to be invalid for the future.

The Emperor determines the organization of the different branches of the administration, and the salaries of the civil and military officers, and appoints and dismisses the same.

The Emperor declares war, makes peace and concludes treaties. The Emperor orders amnesty, pardon, commutation of punishments, and rehabilitation.

The Imperial Diet shall consist of two Houses — a House of Peers and a House of Representatives. The House of Peers shall, in accordance with the ordinance concerning the House of Peers, be composed of the members of the Imperial Family, of the orders of nobility, and of those persons who have been nominated thereto by the Emperor.

The House of Representatives shall be composed of members elected by the people, according to the provisions of the law of election. No one can at one and the same time be a member of both Houses. Every law requires the consent of the Imperial Diet.

Both Houses shall vote upon projects of law submitted to them by the Government, and may respectively initiate projects of law. A Bill which has been rejected by either the one or the other of the two Houses shall not be again brought in during the same session.

Both Houses can make representations to the Government as to laws, or upon any other subject. When, however, such representations are not accepted, they cannot be made a second time during the same session.

The Imperial Diet shall be convoked every year. A session of the Imperial Diet shall last during three months. In case of necessity, the duration of a session may be prolonged by Imperial order. When extraordinary necessity arises, an extraordinary session may be convoked, in addition to the ordinary one. The duration of an extraordinary session shall be determined by Imperial order. The opening, closing, prolongation of session, and prorogation of the Imperial Diet shall be effected simultaneously for both Houses. In case the House of Representatives has been ordered to dissolve, the House of Peers shall at the same time be prorogued.

When the House of Representatives has been ordered to dissolve, members shall be caused by Imperial order to be newly elected, and the new House shall be convoked within five months from the day of dissolution.

No debate can be opened, and no vote can be taken in either House of the Imperial Diet, unless not less than one

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The President declared the session adjourned at 10 o'clock.

A motion to adjourn was lost by the following vote:

Yeas—Messrs. Adams, Bacon, Cummings, Dawson, Fitzpatrick, Hamilton, Hopkins, Jones, Kelly, Lawrence, Lyons, Mann, Mitchell, Morris, Pendleton, Pratt, Reynolds, Robinson, Sherman, Smith, Stanton, Stevens, Thomas, Tucker, Wallace, Warren, Wilson, Wright, Young—31.

Nays—Messrs. Allen, Brown, Clark, Davis, Edwards, Foster, Grimes, Harris, Howard, Johnson, Lane of Indiana, Lane of Kansas, Pomeroy, Ramsey, Sherman, Sumner, Trumbull, Wade, Wilkinson—19.

Absent—Messrs. Anthony, Chandler, Cragin, Fessenden, Fowler, Henderson, Howe, Lane of Oregon, Morrill, Nesmith, Ross, Saulsbury, Sprague, Tipton, Willey—15.

The President announced the following committees:

To the committee on finance, Messrs. Sherman, Fessenden, Morrill, Hamlin, Grimes, Collamer, Wilkinson, Pomeroy, Howard, Wright, Cragin, Foster, Henderson, Ross, Saulsbury, Bayard, Hendricks, Carlile, Nesmith, Wade, Chandler, Sumner, Trumbull, Harris, Doolittle, Lane of Indiana, Lane of Kansas, Lane of Oregon, Pomeroy, Ramsey, Stewart, Sherman, Wilkinson, Howe, Morrill, Fessenden

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third of the whole number of members thereof be present. Votes shall be taken in both Houses by absolute majority. In the case of a tie vote, the president shall have the casting vote.

The deliberation of both Houses shall be held in public. The deliberation may, however, upon demand of the Government or by resolution of the House, be held in secret sitting. Both Houses of the Imperial Diet may respectively present addresses to the Emperor. Both Houses may receive petitions presented by subjects. Both Houses may enact, besides what is provided for in the present constitution and in the Law of the Houses, rules necessary for the management of their internal affairs.

No member of either House shall be held responsible, outside the respective House, for any opinion uttered or for any vote given in the House. When, however, a member himself has given publicity to his opinions by public speech, by documents in print or in writing, or by any other similar means, he shall in the matter be amenable to the general law. The members of both Houses shall during session, be free from arrest, unless with the consent of the House, except in cases of *flagrante delicto* or of offences connected with a state of internal commotion or with a foreign trouble.

The Minister of State and the delegates of the Government may at any time take seats and speak in either House.

An Imperial proclamation for the convocation of the Imperial Diet fixing the date of its assembling, shall be issued at least forty days beforehand. The members shall assemble in their respective Houses upon the day specified in the Imperial proclamation of convocation. Upon the organization of both Houses, the day for the opening of the Imperial Diet shall be fixed by Imperial order, and the ceremony of opening shall be celebrated by the assembling of the members of both Houses in the House of Peers. The closing of the Diet shall be effected in a joint meeting of both Houses, in accordance with Imperial order.

The present Imperial Parliament Buildings are but temporary structures to serve until more adequate and imposing ones now under contemplation by the Government shall be built. They are situated in Uchisaiwaicho, Kojimachi, Tokyo, and are appointed in Western style. The only difference in the arrangement of the two Houses is the Imperial Throne in the House of Peers.

Prince Tokugawa was recently reappointed president of the House of Peers, among the most active members of which may be mentioned Barons Kaneko, Goto, Hamao and Kikuchi, and Viscounts Sani and Soga. Mr. Haseba is president of the House of Representatives, whose most prominent members are Inugai Ki, Oishi Masami, Kono Hironaka of the *Kokuminto*, also Shimada Saburo, who is noted for his eloquence; and Matsuda Masahisa, Sugita Teiichi, Hara Kei, and Hatoyama Kazuo, of the *Seiyukai*.

Members of the House of Representatives are distinguished by numbers indicated upon their desks, and they obtain permission to speak by calling out this number, sometimes accentuating it by rapping upon the desk, so that a lively din is often kept up. Speeches are made from a rostrum and politeness and good order usually prevail, though aminated scenes frequently occur and at times dignity has been laid aside, and language and behavior have been unbecoming. The debates have been recorded from the beginning of the Diet by means of a stenographic system adapted to the Japanese syllabary.

Admission to sessions may be had both by natives and foreigners, through the courtesy of the presidents or members, and a balcony provides ample accommodation for visitors.

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HIROSHIGE

By RENE T. DE QUELIN

HIROSHIGE was one of the greatest artists of the color print school, known as the *Ukiyoye Ryu*, which drew its disciples entirely from the artisan class, and who worked strictly in the old Japanese methods, using the old native colors before the introduction of crude, violent aniline dyes.

He was born in 1706, during the reign of the Mikado Kokadzu. Nothing absolutely reliable is known of his parentage further than that he sprung from the artisan class. At the age of ten he displayed unusual ability as an artist; he devoted his time to the copying of masters in color prints, and aspired, at the age of fifteen, to enter the studio of the then great artist, Toyokuni I. who, unfortunately for the lad, could not take him, as he was already overcrowded with pupils.

Through the kindly interest of the proprietor of a book and print shop who interceded for him, he gained admission to the studio of Toyohiro. Hiroshige made the most of his opportunity, and soon won the admiration of his master with whom he worked with perfect understanding and harmony until that artist's death, and at that crucial time began life on his own account, at once adopting the theatrical style, which was then at the height of its popularity, but after much work, may failures and consequent disappointments abandoned it, and removed to Kyoto, where he took up the art of landscape painting.

There he worked out and made a beautiful set of views of the Mikado's old capital, which attracted so much attention and became so popular as to make him at once famous.

Feeling at last assured of his forte and line of work, and with a very definite idea formulated as to his future activity, he decided to return to his native city, Yedo, where he began assidously to fulfill his plan.

As his nature was such that he enjoyed the humorous side of things, he often indulged in caricature, but never at any time gave himself to portraying actors and women, as did his contemporaries. He ranked with the stars of his time, such as Utamaro, Toyokuni, Harunobu and Hokusai, he gained the highest reputation for his wonderful, poetic renderings of late sunset and twilight, that time when all the world seems hushed into a mystic silence.

There was, perhaps, no color print artist who showed the fine mastery he did for landscape composition, the beautiful harmony, the superb relation and affinity each part has for the other; the result of very keen perception and perfect judgment as to the unity of the whole, and an unusual talent for construction as expressed in picture building.

In drawing and form we find an extraordinary grasp of all that appeals to the human heart in nature, depicted in its grandest simplicity, by the elimination of all possible unnecessary detail. No man of his time seemed so well to understand the value of omitting superfluous detail.

Though it is generally more difficult to detect bad drawing in trees and their thousand and one shapes, which may also be said of mountains, lakes and shores, still, we instantly recognize the

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HIROSHIGE

DE TRIBUT DU COMITÉ DE

HIROSHIGE was one of the foremost masters of the copper-plate school, perhaps the most famous of all the artists who produced the popular prints of Japan. Yet little is known of his life, and even his name is not certain. Hiroshige was a pseudonym, and he signed his prints with many other names, including Ando, Ando Tokitaro, Ando Hiroshige, Hiroshige Tokitaro, Hiroshige Ando, Hiroshige Ando Tokitaro, Hiroshige Tokitaro Ando, Hiroshige Ando Hiroshige, Hiroshige Hiroshige, Hiroshige Tokitaro Tokitaro, Hiroshige Ando Ando, Hiroshige Ando Tokitaro Hiroshige, Hiroshige Tokitaro Ando Hiroshige, Hiroshige Ando Tokitaro Ando, Hiroshige Ando Tokitaro Hiroshige Ando, Hiroshige Ando Tokitaro Hiroshige Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Tokitaro, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Ando, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige, Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Ando Tokitaro Hiroshige Tokitaro, Hiroshige Ando Tokitaro

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false note when the vigor and life of this specialty have not been well portrayed.

In his figure work he was very careful with his drawing, individual expression and composition, and there was much subtle refined humor, no picture being without this interest, usually profusely rendered.

In color and harmony he excelled and was one of the last who worked in natural native pigments after the importation of European chemical colors that were so gaudy, the master fully appreciating the vast difference and revering the old for their true beauty, and owing to the increasing difficulty of obtaining them, preserved his own collection for a grand *tour de force*, but died without having accomplished that aim.

There is much misunderstanding as to the differences between natural and artificial colors, it being generally thought that the former never fade; but this is incorrect, for none are permanent, their difference in this respect being that the old natural colors fade with evenness, whilst the artificial ones do not. But the gaudiness of the latter is owing only to selection, as there are thousands of exquisitely soft tones produced by chemical colors, as well as the violent hues, and it only wants knowledge of them to choose those equally as permanent and harmonious as the natural dyes.

Hiroshige's grasp of color was marvelous, his recognition and perfect understanding of a pitch or key for the melody, and the exquisite rhythm with which he carried it through, proclaimed him a master colorist; the power of his masses and tonal qualities are unsurpassed.

His vision and penetration for the expression of aerial perspective in the different grades of atmosphere in unison with the diminution of groups and objects, showed his knowledge and ability in this difficult problem.

A man's work mirrors his inner self, and if we study the color prints by Hiroshige we find a poetic record; we see his soul, hear the low murmur of the voice within rising and falling, sometimes swelling into music that rejoices in the tender sentiment of twilight, the soft glow of the moon, the gentle beauty of the mists, the sweet silence of approaching night, the twinkling of the stars, the evening breeze.

He wielded the poet's brush as well as the painter's, and attained some distinction thereby. In a stanza written shortly before his death he said, "I leave my brush in Yedo, for I go to the West, to a country of other landscapes."

He died 1858 and lies buried in the grounds of Togaku temple, Asakusa, Tokyo. He was practically the last of the great color print artists, for the change had already taken place in the government of the country that seriously affected the progress of art, nay even caused it to fall into decadence.

His portrayals of scenes along the Tokaido, the *Omi Hakkei*, and pictures of old Yedo and its environs embrace many masterpieces, descriptions, as well as illustrations, of some of which will assist one to a better understanding of his work. "Mishima in the Morning Fog" is a very forceful picture, in which skilful draughtsmanship, knowledge and value of perspective, and discrimination between principal and subordinate parts and their values to each other all played their part.

All is made subject to the central group, whose seemingly inconsistent differences of attire for a cold, raw, misty morning such as is experienced in Japan, appeal to our credulity; yet it is quite true to life, even to-day, and just such scenes may be witnessed anywhere in the rural districts, the same costumes, the

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"RAIN AT SHONO," BY HIROSHIGE I.

"SNOW AT KAMBARA," BY HIROSHIGE I.

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"MISHIMA IN THE MORNING FOG," BY HIROSHIGE I.

"KISO MOUNTAINS IN WINTER," BY HIROSHIGE I.

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same manners and methods.

The happy indifference of the coolies, scantily clad, bearing the *kago* on a pole, keeping step with a peculiar swing, and measuring the gait with sticks in hand, is a familiar sight. They pay little attention to the weather.

He with bundles carried on each end of a pole, is sheltered beneath his *kasa*, or umbrella hat; the occupant of the *kago* is tucked snugly in and so is indifferent to the morning fog; and the individual perched between packs on the pony, though not so fortunate, is well cloaked and hidden. There is much subtle humor in the group.

The great charm and strength of the picture is in its wonderful breadth, with pure, flat, even tones, and no attempt at shading to give the modelling of objects; that is secured by a few well chosen and direct lines; in color it is simplicity itself.

"Rain at Shono" well expresses a rain storm and types of travellers who are so exposed to a merciless down-pour in Japan. The same humorous inconsistency of apparel is shown. The coolie carrying the rear end of the *kago*, is bare of clothing except for a waist cloth, *kasa* hat and *waraji* (rice straw sandals), his fellow retaining his tunic; while the wayfarer in front is provided with a native rain coat made of straw, and a *kasa* as well, but seems much perturbed at the sudden attack of the elements. Of the two going in the opposite direction, one is better prepared, having a *karakasa*, or oiled paper umbrella; and the other, though protected by a straw coat and *kasa* is running for shelter. The movement of the bamboos, which bend so willingly to the wind, and the indicated rain, render the action of the elements in a very realistic way, which throws the spectator into a full and vigorous feeling of the storm.

Hiroshige is well known for his fine renderings of snow scenes. "Kiso Mountains in Winter" is a bit of mountainous landscape truly characteristic of Japan; the pointed, peaky prominences are not the least exaggerated, and the river and its stones and miniature islands bearing quaint little trees, apparently growing out of rock, are also peculiarly Japanese. The rendition of snow is most effective, and cleverly obtained by a few delicate washes.

Another snow scene of excellent execution, is a view of the village of Kambara, on the Tokaido. The place seems asleep under its white coverlet; only three figures and their lonely footprints give signs of any life. The whole picture stands out boldly from a dark background forming the horizon, and dotted with falling snowflakes.

Whilst this master was exceptionally fond of winter's white mantle and of tender, dreamy moonlight, it must not be supposed that he was not equally strong in the dark effects of cloudy night, for in his "White-bait Fishing in Tsukuda" we find great strength and power in portraying night, as also in "Karuizawa After Sunset," a colorful picture of splendid simplicity, and "Azuma-no-mori in the Rain," an effective piece whose darkness is relieved by a light *torii* and white banners hung along the approach to a Shinto temple nestling in a clump of trees. A preponderance of brownish black is offset by two lakes in blue, and the merest suggestion of yellow in the flags, straw rain coats and *kasa* of two travellers, which shows the artist's remarkable understanding and powers of relief by contrasts.

But Hiroshige was at his best in a more poetic vein, in a moonlit atmosphere; and one of the most charming of such portrayals by him is called "Drawing Salt-water by Moonlight," it is exquisitely rendered, and shows his con-

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[illegible] „Kiso-[illegible] in Mitter" is a pit of monumental [illegible] [illegible] [illegible]

[illegible] masses, [illegible] by a surprising number of high lights in the low lines indicating the ripples of the water on the beach, and the distant moors. The painting is composed of absolutely [illegible], simply [illegible], suggestive of an island, comprehending the two [illegible], and [illegible] water. For the study of [illegible] masses and the combination of [illegible] it is great, and one to be [illegible] by every [illegible].

Another excellent study in Indian ink is his "Lake-Island," a river view, in straight line [illegible] the horizon; in the foreground is an [illegible] grass, behind which rises the square sail of a boat which is [illegible] the foreground [illegible] mass of [illegible], with a few very small pine trees in the distance, [illegible] along the [illegible] on land; in a small boat [illegible] in his net. [illegible] a cloud in the sky [illegible] ripple on the water; [illegible] plain [illegible] of [illegible], block and [illegible] flow, the [illegible] of the wood block. Hiroshige [illegible], the gradation being left to the judgment of the painter.

The [illegible] of Hiroshige's work, [illegible] to popularity [illegible] the subject, done with a [illegible] and [illegible] land, the [illegible] of years of study and practice, with all possible elimination of detail; so modelling, but perfect, yielded, that is not of color for the rendering of perspective. Such was the work of Hiroshige I., who perfected the art of landscape in color printing.

Hiroshige I. had two adopted sons who were pupils that followed him very closely, and became known as Hiroshige II. and III., and though they had neither the power nor ability of the master, they evidently executed much work from his sketches and produced a number of landscapes whose true authorship it is difficult for one not familiar with the characters of the several signatures to decide, as the signatures are quite similar. Hiroshige II. became masked in some obscurity after the death of his master and had to remove from Tokyo (later to visiting art altogether so far as known), whereupon Hiroshige III. signed his work. Hiroshige II. during which time he executed considerable meritorious work, more of which is attributed to the more original Hiroshige by his designed master, the "Hundred Views of Yedo" and "Thirty-six Views of Fuji" being so designed.

An example of his work is shown in "Hiroshige's Kamakura" (frontispiece). He usually worked on upright panels, whilst the master invariably worked upon horizontal ones. It will easily be seen that there is less breadth in these, owing to an attempt at modelling, and far less suggestive movement. At the same time it is well composed and drawn, interesting, and with a charm its own. Whilst this artist completed the master [illegible] editability, Hiroshige I. stands incomparably the master.

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sumate mastery in broad, simple masses, offset by a surprising reserve of high lights in the few lines indicating the ripples of the water on the beach, and the full moon. The picture is composed of cloudless sky, ocean, sandy beach, suggestion of an island, one pine tree and the top of another, and two men carrying water. For the study of broad, graded masses and the elimination of detail, it is a gem, and one to be recommended to every art student.

Another excellent study in simplicity is his "Tone-Gawa," a river view; a straight line indicates the horizon; in the foreground is a mass of tall grass, behind which rises the square sail of a boat which is hidden; just beyond is a second mass of tall grass, with a few very small pine trees in the distance, scattering along the horizon line; in a small boat stands a man drawing in his net. Not a cloud in the sky nor a ripple on the water; just plain graded tones of blue, green, black and yellow, the grain of the wood block furnishing vibration, the gradation being left to the judgment of the printer.

Therein lies the secret of Hiroshige's work, enough drawing to properly indicate the subject, done with a sure eye and vigorous hand, the outcome of years of study and practice, with all possible elimination of detail; no modelling, but perfect, graded, flat tones of color for the rendering of perspective. Such was the work of Hiroshige I. who perfected the art of landscape in color printing.

Hiroshige I. had two adopted sons who were pupils that followed him very closely, and became known as Hiroshige II. and III., and though they had neither the power nor ability of the master, they evidently executed much work from his sketches and produced a number of landscapes whose true authorship it is difficult for one not familiar with the characters of the several signatures to decide, as the signatures are quite similar. Hiroshige II. became involed in some difficulty after the death of his master and had to remove from Tokyo (later forsaking art altogether so far as known), whereupon Hiroshige III. signed his work Hiroshige II. during which time he executed considerable meritorious work, much of which is attributed to be from original sketches by his departed master, the "Hundred Views of Yedo" and "Thirty-six Views of Fuji" being so assigned.

An example of his work is shown in "Moonlight at Kanazawa" (frontispiece). He usually worked on upright panels, whilst the master invariably worked upon horizontal ones. It will easily be noticed that there is less breadth and force, owing to an attempt at modelling, and far less suggestive movement. At the same time it is well composed and drawn, interesting, and with a charm its own. Whilst this artist emulated the master most creditably, Hiroshige I. stands incomparably the master.

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BUSHIDO OF SATSUMA

By K. S. KOMORI

EX-COMMISSIONER OF THE DEPARTMENT OF EDUCATION

(TRANSLATION)

IV

TOYOTOMI HIDEYOSHI, or *Taikosama* as he is commonly known, was one of the greatest warriors and statesmen that Japan has ever produced. Born of humblest parents, he rose to power by dint of his military genius. It was in 1587 that he brought his supreme power to bear upon Satsuma, which had not acknowledged allegiance to him or yielded to his authority.

Hideyoshi's enormous forces, numbering two hundred fifty thousand men, had subjugated the western provinces of Japan, and now pressed upon the boundaries of Satsuma, which it threatened with annihilation. The forces of Prince Shimadzu encountered the foe under Hideyoshi's younger brother, Hidenaga, whose overwhelming army made the odds ten to one against the brave Satsuma men, who fought with desperate valor and at one time forced the enemy to retreat; but numbers told in the long run.

In the meantime Hideyoshi himself swept with lightning rapidity, from the borders of Higo to the west of Satsuma and encamped with his forces near the castle town of Sendai. The general in command of the castle, Katsura Tadaaki, defended it bravely; but Prince Yoshihisa recognized the extremity of the situation, and desiring to save his clan from utter destruction, he shaved his head and became a monk, repaired to the camp of Hideyoshi and sued for peace, the last of three recognized courses open to warring chieftains; the other two being, first, to fight to the end; second, to commit suicide. In the event of Hideyoshi's not acceding to his request, Yoshihisa had determined to raze his castle and sacrifice his men in a firm, if hopeless struggle.

Hideyoshi was, however, quite magnanimous in his attitude; he not only granted peace to the Satsuma leader, but presented him with a pair of swords which he wore at the time, and feasted, him with eatables and *sake*.

At the same time Yoshihisa's three brothers, Yoshihiro, Toshihisa and Iyehisa, were active in their respective domains devising ways and means to attack Hideyoshi. When they were informed of the peace concluded between their brother and Hideyoshi, two of them obeyed the orders to disarm, but Toshihisa was still refractory and refused to submit. He had previously warned Yoshihisa of the disadvantage of fighting against Hideyoshi, but when he learned of Yoshihisa's submission to the generalissimo, he was sore at heart and his former reasonings went unheeded, and being a brilliant military genius he decided an attack, and sent a letter to his brother to continue the fight, which he declined to do; but Toshihisa sent some of his staunchest adherents to station themselves in ambush in the mountain recesses along the path of Hideyoshi's return.

This, however, had been anticipated, and instead of being in the palanquin carried for him, Hideyoshi marched with

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BUSHIDO OF SATSUMA

THE KAGOSHIMA CONNECTION

BY DR. JAMES HIDEYO-HIRAI OF KAGOSHIMA

Reprinted from the Journal of Education
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VI

Introduction

THE Bushido of Satsuma is one of the Kagoshima traditions which it inherited from the Bushido of Satsuma. It is a unique combination of Buddhism and Shintoism. It is a system of training which aims at the development of character, and at the same time it is a system of self-defence

[illegible] ne sont pas bien [illegible] et [illegible] ne [illegible] ne [illegible] ne

his rank and file, and so the arrows intended to dispatch him, only aroused his anger at the treachery and resulted in an immediate order to Yoshihisa to execute his guilty brother, but he was prevailed upon to grant him life.

But when the invasion of Korea was set on foot by Hideyoshi, Toshihisa was unable to follow, being confined to his bed, seriously ill. It was reported to Hideyoshi that this was but a ruse and that Toshihisa had sinister motives in remaining behind, upon which the *Taiko* sent a threatening command for his immediate execution, in default of which he would invade and wipe out the principality.

Yoshihisa was not prepared to sacrifice the domains bequeathed from his ancestors, and though he regretted the sad fate of his brother, the inevitable had arrived.

Toshihisa's retainers desired him to flee and save himself, but he refused to listen to their entreaties, and together with several of his staunchest followers, bravely met his death, just previous to which he composed a poem which runs:

> If any ask where dwell Seisa's* spirit,
> Tell him that it has flown among the snowy clouds.

His two brothers visited the scene of his death deeply lamenting his unhappy and untimely end, and composed verses in his memory and prayed to his departed spirit. A small shrine was erected by the people of the vicinity, and on the days of sacred festivals it is crowded with visitors from all parts of the province. It is situated near the city of Kagoshima, in a place noted for its beautiful scenery, the name of the temple being Sengakuji.

Contemporary with Toshihisa was Tadamoto, regarded as a model *samurai*, his life being a true and perfect expression of the ethics of *bushido*. His feelings regarding Hideyoshi's invasion of Satsuma, were in unison with Toshihisa's, and he also made preparations for an attack, filled with remorse that Satsuma should yield, with none to save the the honor of her *samurai*; and he even hoped for success in face of such heavy odds, arguing that the long journey must have reduced the power of the invading army; he was determined to fight to the last.

He was in the service of Iyehisa, who had agreed to the peace already concluded by Prince Shimadzu, and his master sent one of his retainers to urge him to be more conciliatory, explaining that Yoshihisa had sent his daughter as a hostage. Although unwillingly, Tadamoto desisted from his plans against Hideyoshi, and later was on his way to be received in audience by him.

Tadamoto was a man of strong personality and physical attractions, very manly in appearance, the possessor of a long, heavy beard. Hideyoshi became much interested in his would-be adversary, and presented him with a very long sword and regaled him with wine and refreshment, and the famous Hosokawa Yusai, also known for his poetical talent, was so filled with admiration for Tadamoto's splendid physique and the manner in which he quaffed huge cups of *sake*, that he composed verses thereon, to which Tadamoto, of course, replied in kind.

When asked by Hideyoshi whether he would still dare to resist him, his immediate answer was that if the Prince of Satsuma should at any time decide to oppose Hideyoshi, he would at once attack.

This even pleased Hideyoshi, and he congratulated the Prince on commanding such a gallant warrior, in whom were

*Seisa was Toshihisa's nom de plume.

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combined the bravery of a *samurai* and the grace of a poet.

Under Nisshin, Tadamoto had received his baptism of fire and had served the Shimadzu family loyally and with no trace of selfish ambition for more than sixty years, having been under four other members of that clan. In the field he had been the most gallant of warriors, in the council he had rendered rare services, entrusted with every State secret. He is said to have declined the grant of extensive domains from his master at the suggestion of Hideyoshi, on the ground that it would reduce the income of his Prince. His superb fidelity, his discernment as a statesman, his literary attainments are all greatly admired. He is said to have spent many evening hours of his camp life reading Japanese classic poems by the light of the *hinawa* (rope match for a match lock). He passed away at the advanced age of eighty-five.

After the invasion of Satsuma by Hideyoshi, the domains of the Shimadzu family remained intact. Yoshihisa, in the following year, repaired to Kyoto to seek an audience with the *Taiko* who received him royally and entertained him lavishly, bestowing upon him many costly presents. Moreover, he obtained for him Imperial sanction for advancing his rank. It was doubtless sincere appreciation of these favors that afterward animated the hearts of Satsuma soldiers to fight so valiantly during the invasion of Korea, as well as at the battle of Sekigahara, when the fortunes of Toyotomi hung on that single battle.

The heart of a *samurai* is full of muses; even on the verge of death he shows no signs of consternation, and there are instances in ancient Japanese history, of famous generals, who were deeply engrossed in composing stanzas on the eve of decisive battle. The spirit of valor and bravery seems to have been harmonized with love for the beautiful and elegant in the *samurai* of Satsuma.

When Yoshihisa was about to depart for his native province, leaving his daughter, a princess of tender years, as a hostage at the court of Hideyoshi, he was filled with sorrow at the parting and expressed his feelings thus:

> How pitiful to part asunder child
> And father whose two lives should e'er unite.

On hearing of it, Hideyoshi gave orders that the young princess should return to Satsuma with her father, for which the latter was exceedingly grateful.

Yoshihisa was very fond of learning and engaged the priest Bunshi, a disciple of Keian, as his preceptor; the Prince's lofty ideals may be judged from numerous poems which he wrote. His just and merciful government of his people caused him to be held in highest veneration, and he was regarded with such love by his followers, that fifteen of them were constrained to commit suicide in order to serve him in another world.*

Yoshihiro, who succeeded Yoshihisa, as the seventeenth Prince of Shimadzu, proved a brave general and a magnanimous one, and during his time the invasion of Korea under Hideyoshi took place. Upon the *Taiko's* determination to attack the Ming dynasty, he asked Korea to act as guide, which being refused, he decided to attack Korea first.

In 1592 Yoshihiro and his son, Hisayasu, joined Hideyoshi's invading army at Nagoya, with a force of ten thousand. Tadamoto referred to above, was by this

*The custom of *junshi*, or death by his own hand of the retainer of a *daimyo* or other person of high rank at their demise, had its origin in the belief of the immortality of the soul and its ability to serve the same master in another world, and *junshi* was considered highly honorable; but, though commended in spirit, the practise was condemned and abolished in a later age as cruel and barbarous. At the time of the death of Nisshin such a large number volunteered for *junshi*, a strict injunction was issued against it.

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[illegible]

[illegible]

[illegible]

time so advanced in years he was unable to join the ranks, and sent a poem expressing his regret to Yoshihiro as follows :

My spirit saddens, since I must confess
The days are gone when strength supported valor,
In enterprise of war, e'en though removed
To such a distant land as thither you embark.

To which the latter responded :

How great and deep the feeling of your heart!
For it goes forth with us to far Sino.*

Arrived in Korea, the Japanese generals met with great success ; among them Yoshihiro figured prominently, being several times honored with letters of praise from Hideyoshi, who rewarded him for his military exploits. There was also a very gloomy side, however, for Satsuma was hardly able to provision the men at the front ; but the martial spirit which had been nurtured for centuries bore the crucial test. For months, the leaders, as well as the men, had but a single bowl of rice gruel a day, and endured the hard Korean winter wearing only thin cotton garments, but it robbed them of not a single man. Later, though, Yoshihiro lost his son, who fell ill, and a younger son, hearing of his brother's death, hastened to Korea to take his place at his father's side.

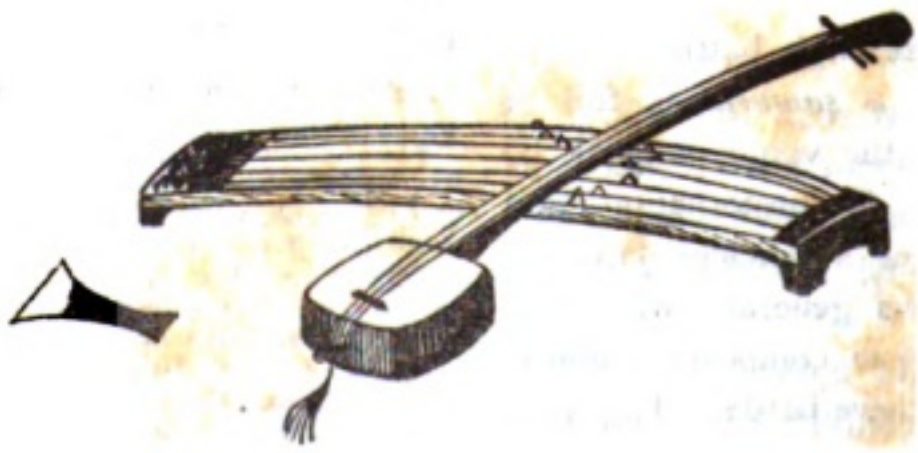
* The Japanese word for China.

A favorite story among *samurai* was one written about Yoshihiro's tiger hunt in Korea. Hideyoshi conceived the idea of curing an illness by partaking of tiger flesh, and commanded Yoshihiro to slay an animal and send him the flesh, which he accomplished, together with several of his retainers, and the episodes connected therewith were interesting and lively.

Japan was victorious, and the King of Korea fled to the north and two young princes were made captives by the Japanese. The Chinese were at last obliged to dispatch an envoy to Japan to sue for peace. The Japanese made a triumphal return, Yoshihiro among them, being heartily welcomed and entertained by Hideyoshi.

Peace lasted but a short time, when Korea was again invaded, Yoshihiro returning and winning signal victories over the combined forces of Ming and Korea. In the following year, the great master spirit, Hideyoshi, passed away, during the height of the campaign ; but he left commands ordering the cessation of the war. It seemed doubtful whether the Japanese army would be able to successfully withdraw, but Yoshihiro accomplished it most admirably by his success at Shisen, which proved the salvation of the Japanese forces.

(*To be continued*)



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THE THIRTY-THREE PLACES

LEGEND assigns the origin of the Thirty-three Places, as such, to a command received by Tokudo *Shonin*, a Buddhist priest of profound learning and brilliant parts, from Emma-o, the ruler of Hades, while the former was in a trance which lasted several days, during which time he was as dead, save that his body retained its warmth, causing his friends who watched over him in great alarm, to refrain from burying him.

When the priest awoke from his strange sleep he discovered that he carried in his hand a jewelled seal, which bore testimony to the fact, as related to his followers, that he had been summoned to appear before Emma-o, who wished to make known to the world through him, the existence of Thirty-three Holy Places sacred to Kwannon, the goddess of mercy (who had divided her body in order that she might provide relief to all forms of suffering), and that all who made the pilgrimage to those places would be forgiven their sins and saved from the punishments of the lower-world over which he, Emma-o, held sway. Indeed such pilgrims would find themselves radiant with light, and with power to destroy all the one hundred thirty-six hells.

Accordingly, Tokudo was given a list of the Thirty-three Places with instructions to return to the world and make them known to all sinners, but realizing the scepticism of the people, he asked for some sign by which to verify his message, and had received Emma-o's seal, which he now carried.

The good priest and his disciples set out upon the first pilgrimage to the Thirty-three Places, going first to the oldest of the temples dedicated to the merciful goddess, Nakayama-dera, in Settsu Province and there they left the jeweled seal in a stone casket, where it still remains.

During Tokudo's time many believers journeyed to these Holy Places, but the custom later fell into disuse, to be revived again after two centuries, when Emperor Kwazan, upon the death of his much beloved consort, became a monk, and in accordance with a vision, undertook the pilgrimage inaugurated so long before by Tokudo *Shonin*, but in a different order, as presented here, which has remained unchanged down to the present time.

Each of these temples has what is called a *goyeika* which treats of the holiness and beneficence of Buddhism, giving the name of the particular temple to which it belongs; it forms a sort of psalm which the pilgrims chant many hundred times, on their journey, in a slow, plaintive tune to the accompaniment of a small bell, receiving in return a bit of rice or a pittance in money, as they go from house to house, and they have no other means of subsistence.

They wear a peculiar garment called *oidzuru*, made of white cotton cloth on which appears in Chinese characters the legend 'Pilgrim to the Thirty-three Places of the Western Provinces,' and at each temple visited its name is stamped upon their backs.

Amongst the hills and water-falls of Nachi, in Kishu, is number one, of the Thirty-three Places. It was founded in the time of Emperor Nintoku, by a Buddhist

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THE THIRTY-THREE PLACES

[illegible] relates the origin of the [illegible] Thirty-Three Holy Places, as well, [illegible] according to Tokuo Sakaya, a [illegible] priest of prodigious learning, and [illegible] part, from Kumano, the [illegible] Holy Places, while the former was in a [illegible] which lasted several days, during [illegible] time he was [illegible] at his [illegible] revealed its summit, causing his [illegible] to be wrapped over him in great [illegible], to refrain from burying him.

When the priest awoke from his [illegible] sleep he discovered that he was [illegible] in his hand a jewelled seal, which [illegible] testimony to the fact, as related to [illegible] Takuo, that he had been summoned [illegible] to Kumano, who wished to [illegible] to the world through him, [illegible] Thirty-Three Holy Places [illegible] to have been the goddess in memory [illegible] divided its body in order that [illegible] might provide relief to all forms of [illegible], and that all who made the [illegible] to those places would be [illegible] from their sins and saved from the [illegible] of the lower world over [illegible] by Kumano, held sway. Indeed [illegible] pilgrims would find themselves [illegible] with light, and with power to [illegible] all the one hundred thirty-six [illegible].

Also, briefly, Takuo was given a list [illegible] Thirty-Three with as much [illegible] to return to the world and make [illegible] known to all sinners, [illegible] [illegible] of the people [illegible] [illegible] sign by which to verify his [illegible], and had received Kumano's [illegible] seal, which he now carried.

He [illegible] and his disciples [illegible] the first pilgrimage to the [illegible] Thirty-Three [illegible] [illegible] of the temples dedicated to the mystical goddess. Although [illegible] Sakaya [illegible] there they [illegible] jewelled seal in a stone casket, where it still remains.

During Takuo's time many believers journeyed to these Holy Places, but the custom later fell into disuse, to be revived again after two centuries, when Emperor Kazan, upon the death of his much beloved consort, became a monk, and in accordance with a vision, instituted the pilgrimage, instituted so long before by Takuo Sakaya, but in a different order, as we now know it, with [illegible] [illegible] to the present time.

Back of the temples lies what is [illegible] a pagoda, which houses [illegible] Buddhas, and beneath one of the [illegible] is the tomb of the priest, in temple to which it belongs, forms a [illegible] within the pilgrimage, count many hundred times, on their journey, in a slow, plodding way to the accompaniment of a small bell, receiving in return a bit of rice or a pittance in money, as they go from door to door. To homes and they have no other means of subsistence.

They wear a peculiar garment of white sackcloth, made of white cotton cloth on which appears in Chinese characters the sacred "Pilgrim" to the Thirty-Three Places of the Western Provinces, and a conical bamboo sedge hat, its mouth covered upon their backs.

Just west the bridge and some miles of Kyoto, in Kishu, is a modern copy of the Thirty-Three Places, [illegible] the tree of Emperor Shinsaku, by a Buddhist

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priest, Ragyo, who believed Mount Nachi to be sacred, and built there a small hut where he devoted himself to the study of Buddhist canonical books. One day, while he sat in quiet meditation gazing intently upon a water-fall, he saw an image of the goddess Kwannon, floating upon the foaming waters below, and as he fixed his eyes upon it, it moved toward him and finally rested upon his sleeve. He carried it into his hut and enshrined it there and prayed to it day and night. After the death of Ragyo, no trace of the image was found for more than five hundred years, when it was discovered by Shobutsu, and a temple was constructed for its worship. The present building dates back to the year 1590, and bears interesting testimonies as to the veneration in which it has been held by thousands of pious pilgrims. It is called Fukaraku-ji and its *goyeika* may be translated as follows: 'Waves on the shore of Fudaraku (Paradise) sound forth messages from Kwannon, echoed by the water-fall of Nachi, which to mere mortals has but the sound of rushing water, but is really a note in the teachings of Buddha.'

Kimii-dera, in the neighborhood of Osaka, is number two. Its legend attributes its founding to a miraculous incident in the life of a Chinese priest named Iko, who had come to Japan to spread the faith of Buddha. While seeking a place to establish a temple, he saw at night, on the top of a mountain, a wonderfnl light, and pursuing it found it to radiate from an image of Kwannon, standing on the branch of a pine tree. He located his temple there and enshrined the image, but considering it too sacred to be exposed to public view. he carved another image, which is now in the main temple, the first one being treasured in the reliquary.

Kokawa-dera, number three of the Holy Places, is also in Kishu, not far distant from Kokawa station. It is a very ancient shrine, having been founded 779 A. D. by Otomo Kushiko a *samurai* residing in that locality, who had made hunting his avocation, and while on such an expedition in the mountains, beheld, one night, a divine illumination which converted him to the teachings of Buddha, and he straightway forsook hunting and built a shrine, and spent his time in devout meditation.

A youth came to his cottage one evening and asked shelter for the night; he was most grateful for the priest's hospitality, and on leaving the next morning, expressed his desire to send him some gift, and inquired what he would most like. Otomo at once thought of the long-wished-for image for his shrine, and told the youth that was what he most wanted. It was promised and soon a golden image of Kwannon arrived, since which time Kokawa-dera has been a celebrated sanctuary.

The present buildings are not, of course, as ancient as the story of their origin, but are at least three centuries old, and contain carvings and various art treasures of much value, and are surrounded by beautiful gardens with splendid old trees.

Number four, or Sefuku-ji, is in Izumi Province, south of Osaka. There are forty-eight water-falls and thirty-six caves in its vicinity, and it is highly venerated as a sacred place, though little is known as to the founding of the temple. The famous Kobo *Daishi* studied at this place, which is situated in a mountain recess, and to reach which one must pass through thickly wooded pine and cryptomeria forests.

At Fujii-dera, in Kawachi Province, is Gorin-ji, the fifth of the Holy Places. This temple bears the distinction of

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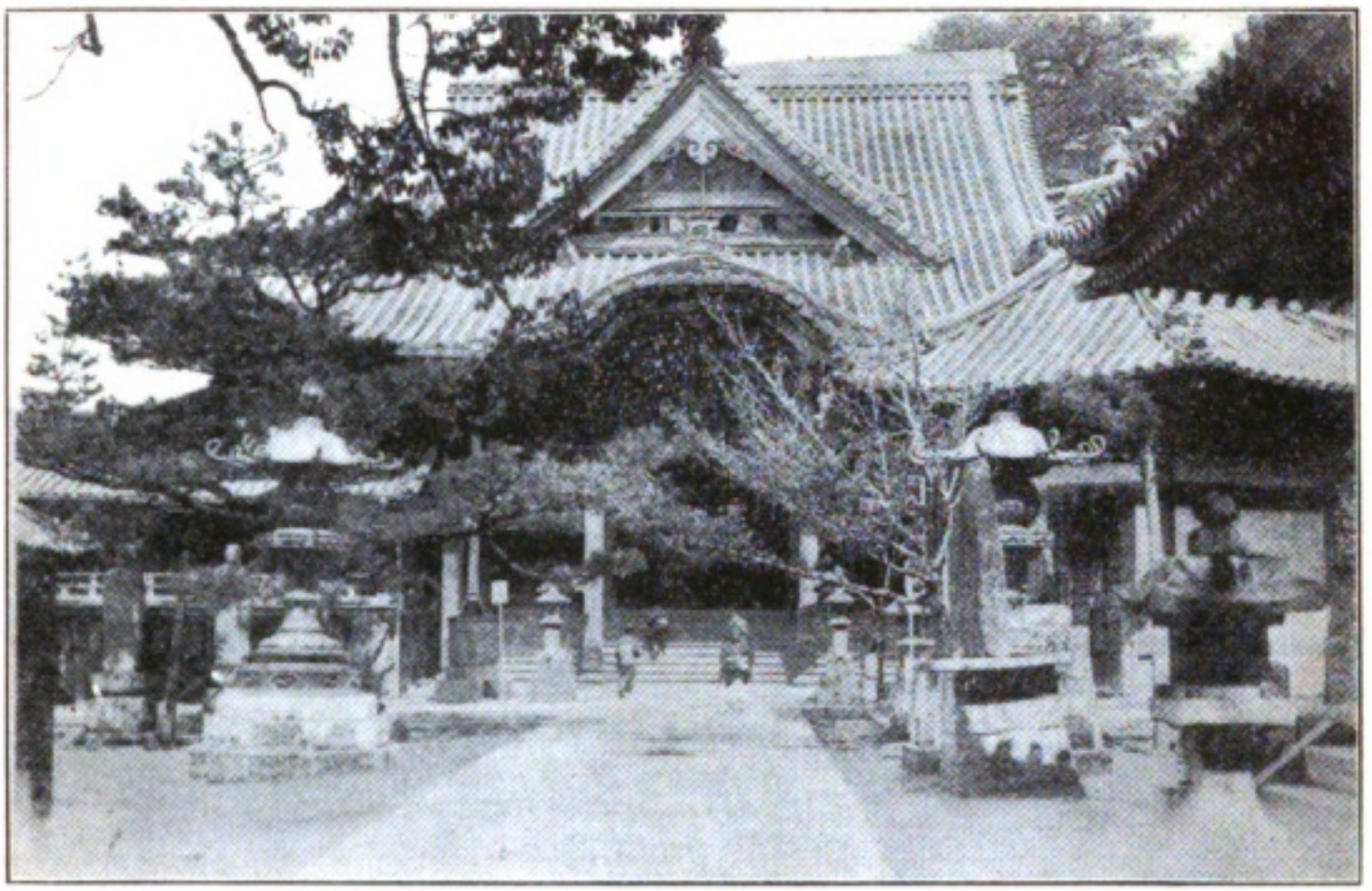

KIMII-DERA

KOKAWA-DERA

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TSUBOSAKA-DERA

OKA-DERA

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having been erected by Imperial order of Emperor Shomu, 1384. The principal image is the so-called Thousand-Handed Kwannon, about four and a half feet in height, carved by Keimonyekei Shami. Many rare historical relics are preserved is this temple among which may be mentioned the banner used by the youthful loyalist, Kusunoki Masatsura; an image of Buddha by Yeshin; a painting of the Sixteen Saints, by Takuma, and a picture of a pagoda by Tosa Shokan. The history of Gorin-ji was written by one of the most noted writers of the middle ages, Sanjonishi Sanetaka.

The next of the Thirty-three Places, Tsubosaka-dera, in Yamato Province, is also said to have been founded by Imperial order, in the eighth century, during the reign of Emperor Gensho, but a second tradition assigns its origin to a later ruler, Emperor Kwammu (782-805), who, being afflicted with a disease of the eyes which had entirely closed them, rendering him blind, called upon the Buddhist priests to heal him, saying if they were unable to do so Buddha was not worthy to be worshiped. It was some time before a priest was found who would volunteer to intercede for him, but at last Hoon Shiami, a famous priest living on Mt. Yoshino, learned of the Emperor's request and went at once to offer his services. He closed his eyes, recited passages of Buddhist scriptures, and lo! the Emperor's eyesight was at once restored. His Majesty immediately ordered the priest to erect a temple.

In searching for a suitable site, while spending the night at Tsubosaka-dera, the priest heard a voice repeating sutras which seemed to come from beneath the earth. Making an excavation he found an image of Kwannon, and the temple was erected upon that sacred spot. Another story relates how a blind man praying at this shrine for one thousand days had his sight restored, and with his wife set out on a pilgrimage to the Thirty-three Places.

Oka-dera, also in Yamato Province, as are five others of the Thirty-three, is number seven. This place was the site of the Imperial residence of Emperor Jomei (629-641), and then called Okamoto-no-miya, and the temple was originally named Okamoto-ji. It was established by Gien Sojo, a priest noted for his profound learning and high moral character, at the wish of Emperor Tenji.

Among the treasures of Oka-dera are a tablet bearing the autograph of Kobo *Daishi*, and a seal engraved by the Emperor Koken. Its *goyeika* is as follows: 'Gazing upon Oka-dera's garden with its morning dew-drops, shining gems nestling in the moss, it is like the Garden of Paradise, the ground of which is covered with lapis lazuli.'

Hase-dera is number eight; another of the Yamato Holy Places, (a pilgrimage of which is called *Yamato-meguri*), and perhaps the most interesting of them all. Its Kwannon is a life size figure in gilt and is surrounded by famous paintings, several of which are attributed to Kobo *Daishi*. It was founded in the eighth century; the present structures were built in 1650, and their position upon the hill-side command a fine view, and the many flights of steps, various gates, lantern lined ways and small shrines make it most picturesque. The *Nio-mon*, or Gate of Two Deva Kings, is at the foot of the hill, facing south and a distance of some five hundred feet from the main temple.

During the reign of Emperor Go-Ichijo (1017-1056), there lived in Kasuga, Nara, a man suffering with a cancer on his neck. He prayed to the god of Kasuga shrine to be healed, and in a dream was told by the god to pray at

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[illegible] by Imperial order [illegible] 1534. The palace [illegible] is the so-called Thousand-Hundred [illegible], about four and a half feet in height, carved by Kirimonyeki Shunsi. Many more historical relics are preserved in this temple among which may be [illegible] the lantern used by the [illegible] Kiyomori Takamori; [illegible] Hideyoshi [illegible] by [illegible] of the [illegible] Tokugawa [illegible].

[illegible] Tokugawa Iemitsu, in Yamato Province, is said to have been founded by [illegible] order, in the eighth century, during the reign of Emperor Gensho, but [illegible] tradition assigns its origin to [illegible] Emperor Kwanmu (782-806), who, being afflicted with a disease of the eyes which had entirely closed them, rendering him blind, called upon [illegible] priests to heal him, saying: "[illegible] were unable to do so [illegible] not worthy to be worshipped. It was some time before a [illegible] who could [illegible] him, but at last Emperor [illegible] proceeded to the [illegible] Immediately [illegible] to erect a temple [illegible] for a suitable site, while [illegible] the night in Tenchosha-dera, [illegible] heard a voice repeating [illegible] to come from Lumbini [illegible] Making an excursion he [illegible] image of Kwannon, and the [illegible]

[illegible] by imperial order [illegible] 1534. The principal [illegible] is the so-called Thousand-Hundred [illegible], about four and a half feet in height, carved by Kirimonyeki Shunsi. Many more historical relics are preserved in this temple among which may be [illegible] and the lantern used by the [illegible] Kiyomori Takamori; [illegible] Hideyoshi [illegible] by [illegible] of the [illegible] Tokugawa [illegible].

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the temple of Hase-dera, whither he betook himself forthwith, and having prayed for seven days, on the seventh night he saw, in a vision, a crow flying toward him from the temple, and it attacked him and tore open the cancer with its beak. The next morning he awoke completely recovered. As an expression of his gratitude he had constructed over the stone steps leading to the main temple, a covering of *keyaki* wood, forming a corridor or gallery. This remained until the present year (1911), when it was destroyed by fire.

The *goyeika* reads: 'However often I come to Hase-dera, my feelings are the same as on my first visit; the place being so sacred, one's belief should be as deep as the river in the ravine.'

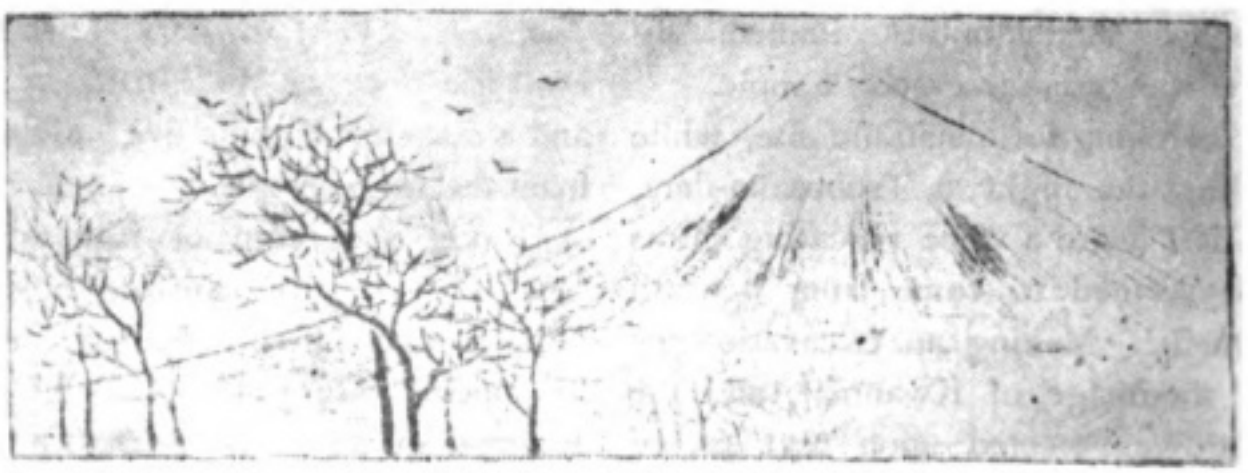
One of the small shrines of the once great Kofukuji, Nara, Yamato Province, forms the ninth of the Thirty-three Places, and is called Nanyen-do. The Kwannon worshiped there has three eyes and eight arms, and is the work of Kobo *Daishi* who presented it to Fujiwara-no-Takamaro, admonishing him, when asked how to secure the greatest blessing for his descendants, to pray to the goddess of mercy.

The surroundings of this temple have many ancient traditions; Nara is one of the most beautiful spots in all Japan, and fills one with a charm that lasts.

Mimuroto-dera, at Uji, in Yamashiro Province, is visited as the tenth of the Thirty-three Places. A legend says, that a most worthy and noble priest of Mount Kamidaigo, had revealed to him by divine light issuing from it, the sacred image of Kwannon in a pond near by. Considering it an expression of the will of Buddha, he enshrined it in Mimuroto-ji, which was afterwards made known as a Holy Place in Emma-o's revelation to Tokudo. The *goyeika* of this temple is: 'I am filled with worldly passions, which I pray Buddha to shake off, and with his blessing I hope to see paradise.'

Kami Daigo-ji, number eleven, is not far from Kyoto. It was founded at the request of Prince Kuzuna, grandson of Emperor Konin (770-781). Priest Shobo is said to have undertaken the work of establishing the new temple, and selected the site where it stands because while living at Todai-ji, the goddess Kwannon appeared to him in a dream and told him he would be blessed if he drank of the waters of Daigo, in Yamashiro, whither he went and found the spring of sparkling water which he regarded as that referred to by Kwannon, and there built his temple. It is regarded as a very holy place.

(*To be continued*)



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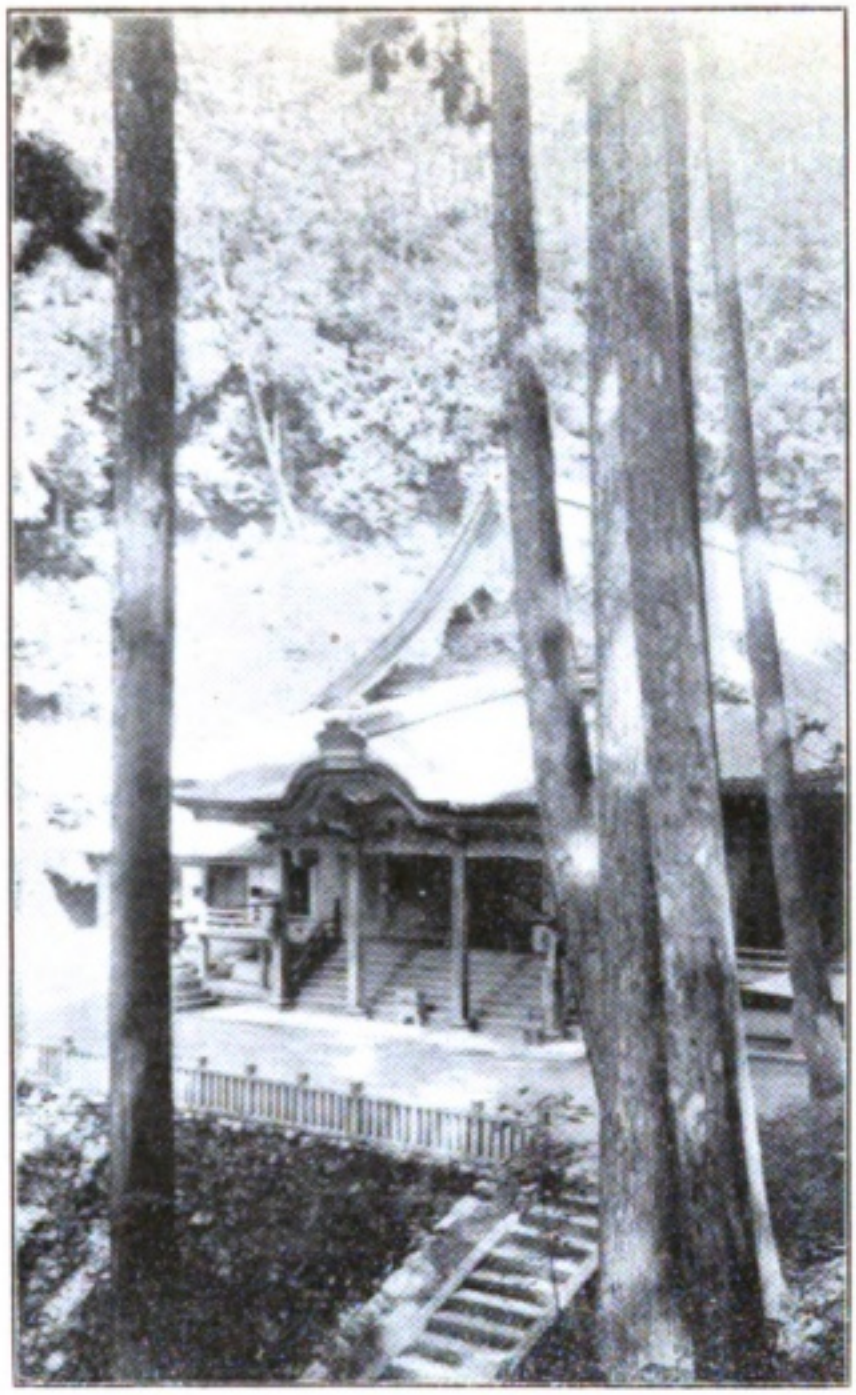

MAIN TEMPLE OF KAMIDAIGO

MIMUROTO TEMPLE

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PEARL FISHERS—MIKIMOTO'S PEARL-CULTURE FARM

WOMEN DIVERS—PEARL FISHERIES, TATOKU ISLAND

ATTACHED NATURAL PEARL

ATTACHED CULTURE PEARL

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THE CULTURE PEARL INDUSTRY

THE idea of causing pearl-producing shell fish to form pearls by means of introducing some foreign object into its shell, probably originated with Linnaeus, the great naturalist, but his method of procedure, which was to pierce the shell and cause a slight wound, was never successfully followed, though experiments resulting from the idea advanced have proved successful.

In ancient times it was thought that pearls were produced in some miraculous manner, such as the crystalizing of a tear or dew drop, but when science stepped into the arena, men soon learned the true nature of those exquisite treasures hidden in the humble house of the mollusk.

The Chinese have achieved considerable success in cultivating pearls in the fresh water mussel, by inserting grains of clay between the shell and the delicate membrane covering the body of the animal. The Germans have produced some very interesting specimens and English naturalists in Australia have experimented in several different ways, but the most remarkable results obtained by Europeans were those shown by Dr. Louis Boutan, of Paris, about 1900, at which time he had succeeded in causing a pearl to be produced on an abalone shell, and this kind of attached pearl became known as "perle Boutan".

Prior to that time, however, pearl culture had been established on an extensive scale in Japan, by Mr. Mikimoto, and the mollusk made to yield a crop of pearls artificially produced that were of such commercial value as to make the new undertaking a permanent industry. This pearl-oyster farm is probably the largest and most successful enterprise of its kind in the world.

Pearls have been divided into three classes according to their shapes: virgin, baroque and seed pearls; the first, regular in form, round or pear-shaped; the second, irregular, somewhat rugged; the third, minute pearl particles found in nests together, very numerous in China, though it is the virgin pearl which is also known as 'oriental'.

They are found in the tissues of various species of mollusk, such as the pearl-oyster, which produces gems of the greatest lustre; the conch, from which are taken the beautiful pink pearls; the sea mussel, whence come black pearls; and the common oyster, giant clam and scallop, whose product is least valuable, having little life or color.

In its secret chamber, entrance to which is gained only at the sacrifice of its life, the mollusk lies within walls of mother-of-pearl of varying tints and brilliancy. In the abalone, or sea-ear, they are rich hues of green and blue and purple; in some pearl-oysters they are almost black, while in the superior pearl-oyster they are azure-tinted white, all having that peculiar iridescence which is the charm of pearls.

This beautiful lining is laminary and composed of carbonate of lime interstratified with animal membrane, and the same coating is deposited upon any foreign substance entering the mollusk's shell by chance or intent; when by chance, the result is a "free" pearl, the perle Boutan, or attached pearl occurring

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THE CULTURE PEAKS IN INDONESIA

THE idea of culture being productive of a certain type of civilization is a commonplace in modern times. It is not necessary to prove that the culture of a people is the product of its environment, and that the culture of a people is the product of its environment, and that the culture of a people is the product of its environment.

Two Chinese have adopted two different methods.

In the second example, culture is defined as the sum of the culture of a people, and culture is defined as the culture of a people

"Unfortunately this cannot be done."

"Why?"

"Because, sir, it is a short-term and cash-to-borrow business in the U.S. today. The initial effort, sir, is failing, and we have reserves left for the budget, but the budget would not consent to be obligated, sir, because it is a long-term business, sir, and the budget would not consent to be obligated, sir, because it is a long-term business, sir, and the budget would not consent to be obligated, sir, because it is a long-term business, sir, and

when an object is inserted by man for the purpose of a culture pearl, as he has not been successful in effecting lodging for a "free" pearl. Not infrequently two tiny objects may enter at once, about which the lustrous coating is formed, joining them together, making twin pearls. The value of all is according to size and lustre, the attached pearls often being of great value because of exceptional beauty and richness of color and iridescence, the most notable case being that of the celebrated "Southern Cross" found off the coast of Western Australia and valued at fifty thousand dollars.

In early youth Mr. Mikimoto paid much attention to Japan's marine industry, and later became a dealer in pearls, which were then plentiful in the Bay of Ago, Shima Province; but the superior quality of the Ago gems caused a demand for them that soon exhausted the supply, which caused Mr. Mikimoto much concern, and he at once turned his attention to the scientific cultivation of pearls, and in a short time had established a propagation station in the bay. The initial effort was a failure, and for several years it seemed that the project would fall through, but its promoter would not consent to be defeated, and repaired to the island of Tatoku with his family, in order that he might personally superintend the work, and his untiring zeal was finally rewarded with success.

The idea having first been suggested to him by Professor Mitsukuri, of the Imperial University Marine Biological Station, Mr. Mikimoto had spent some time in acquiring knowledge concerning the natural history of the pearl oyster, and he felt assured from the beginning of the result which he finally obtained, notwithstanding that his friends endeavored to dissuade him from such an undertaking, believing that he was "throwing his money into the sea" uselessly.

In 1898 Mr. Mikimoto reaped his first harvest of culture pearls, a return sufficient to establish the industry upon an encouraging commercial basis. A patent for the new product had already been taken out.

The uninhabited island of Tatokujima, which had been leased from the Government for the purpose, became the seat of a village of pearl fishers which has kept pace with the enterprise, and now numbers as many as fifty families. The area of these cultivated pearl fisheries has so increased in size that it now extends over the surrounding bay for twenty-nine nautical miles, granted by the Government in recognition of the importance of the enterprise.

The waters of the Bay of Ago are placid and the coast line is irregular with many indentations providing a suitable and agreeable home for the pearl-oyster.

The species of pearl-oyster cultivated is that natural to the bay and found in abundance in many other parts of Japan, and is much like the famous Ceylon pearl-oyster, from which are obtained the finest pearls in the world. They attach themselves, by means of a secretion, to rocks, sea-weeds and water plants at a depth of about five of six fathoms.

Mr. Mikimoto's method of culture is described by him as follows:

"Every year during the months of July and August, small pieces of rock and stone are placed in spots where the larvae of the pearl-oysters have been found to be most abundant. Soon small oyster-spat are found attached to them. As this takes place in the shallow waters of not more than a few fathoms, they would die from cold if left there during the winter, so together with the rocks to

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which they are anchored they are removed to deeper waters and carefully laid out in beds prepared for them.

Here they lie until they reach their third year, when they are taken out of the sea, and undergo an operation which leads to pearl formation. This consists chiefly in introducing into them the small pearls or pieces of nacre which are to serve as the nuclei of pearls.

The shells are then put back into the sea and left undisturbed for at least four years, at the end of which time they are taken out, and it is found that the animal has invested the inserted nucleus with many layers of nacre, and has in fact produced a pearl.

Pearl culture as we have described it may seem to be very simple, but in reality it is by no means an easy work. Large mortality among the pearl-oysters from various causes; the ejection of the inserted nuclei, the depredations of the oysters' enemies, uncertainties attendant upon long years of waiting, are some of the drawbacks which beset the industry.

The most dreaded of all the evils is perhaps the invasion of the so-called "red currant". This has been ascertained to be due to an immense accumulation of microscopic organisms causing a discoloration of the sea water.

Wherever this appears, it is followed, for some reason not yet understood, by a wholesale destruction of marine organisms, and when it invades the pearl culture grounds, it may undo in one day the work of years.

Another unwelcome intruder of the culture ground is a sea-weed called *mirumo* (codium), which if allowed to grow luxuriantly, will cover the pearl-oysters and stop their growth, or even kill them by, so to speak, smothering them.

Again, the octopus plays sad havoc among the pearl-oysters, which it seems to consider a great delicacy, and the starfish is another animal which especially enjoys a meal of pearl-oysters.

The pearls produced as described above are found to be usually attached to the shell, and must be detached. This to some may appear a drawback, but the results are very successful; they look exactly like natural pearls in color and lustre, and in their perfect symmetry. In all cases where half pearls may be used, the culture pearls can be employed and will be found to meet the requirments perfectly."

A most interesting feature of this remarkable industry is that the majority of the work of handling the oysters, transplanting them, placing them in beds, gathering them and returning them to the sea, is done by women divers, there being a universal belief in the regions of oyster fisheries in Japan, that women are able to remain longer under water and to accomplish more and better work than men.

The great success of Mr. Mikimoto's achievement has been recognized by His Imperial Majesty, the Emperor; by the Bureau of Decorations of the Imperial Court; by members of the Imperial family; officially and by many foreign expositions. The Emperor, when visiting the great Shrine of Ise, which is not far distant from the culture grounds, had Mr. Mikimoto summoned to his place of sojourn that he might relate to the Minister of the Imperial Household the history of his culture pearl industry.

The late Prince Komatsu, Viscount Sone and other distinguished Japanese, and foreigners have visited the culture farms to see the pearl banks.

In 1906, Mr. Mikimoto was awarded the Green Ribbon Medal, in accordance with Imperial Order. He received the Grand Prize at the St. Louis Exposition 1904, at the Liege Exposition, 1905, at the Milan Exposition, 1906, and gold

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which they are enclosed they are so-
ward to gather water and carefully
pin on the pressure bag for steam

Here they go until they reach their
final form, when they are taken out of
the ass and integrated in objection which
is to be hard pounded. This consists
chiefly in introducing into them the
small bags or pieces of wood which are
to serve as the mould of bricks.

The shells are then put back into the
ass and left multiplied for at least four
hours, during which time they are
under heavily.

A most interesting feature of this
remarkable industry is that the employ-
ment of the work of handling the oversea
shipments, which have hitherto been
performed by coolies, and consequently
at a very low rate of wages, is now
being carried out by machinery, and
the cost of the hand-operated machine
is comparatively small, and its
operation is very efficient, and the
operation of the hydraulic press
is very simple, and in fact
the machine is so constructed that
it can be operated by a child.

The great success of Mr. Whitehouse's
enterprise is due to the industry
of the Chinese, and the industry
is also a matter of pride to the
Chinese Government, which has
given the Chinese Government
the right to the Chinese Government
the right to the Chinese Government
the right to

ne dans le Kansas Pacific express. Ce-pendant, les hommes qui étaient à la Pension Pierson étaient-ils des voleurs?

Quand les uns et les autres eurent examiné quelques objets mis en évidence par M. Pierson, ils commencèrent à douter. Mais M. Pierson, qui était un homme honnête et loyal, dit que son compagnon, M. Pierson, avait été victime d'une hallucination et qu'il ne pouvait pas croire que le jeune homme fut le voleur. Il était impossible de trouver le moindre indice qui se rapportât à lui. Il était bien connu dans le village et il était de bonne famille. Il avait reçu une éducation supérieure et il était considéré comme un homme honnête et loyal. Il ne pouvait pas être question de lui

medals at the Russian Fisheries Exposition 1902, and at the Portland Exposition 1905.

Among the rare treasures and ornamental objects made or decorated with culture pearls, the one considered *par excellence* by Mr. Mikimoto is his reproduction of the *Gumbai Sen*, or War Fan, the original of which came from Korea and belonged to Toyotomi Hideyoshi more than three hundred years ago. It was presented to the Emperor in 1880, and afterwards exhibited in the Imperial Museum, where it attracted the attention of the pearl expert who desired to copy it. He used great care in selecting and matching pearls as to shape and lustre, the piece requiring more than six hundred, of which two hundred ninety of those used by Mr. Mikimoto are culture pearls. They are embroidered with gold thread upon a ground of rich silk, *Tsusure Nishiki;* the handle and rim of pure gold are thickly set with same.

By years of experience, surprising skill has been acquired and many improvements in the quality of the pearls produced have been noted from time to time, and Mr. Mikimoto now has reasonable hopes of producing "free" culture pearls in sufficiently large quantities to be of interest to the market.

JAPANESE PROVERBS

"The fortune-teller can not tell his own fortune."

"The doctor does not keep himself well."

"The sage sickens. The beautiful woman is unhappy."

"A charred stick is easily kindled."

"Though the magnet attracts iron, it can not attract stone."

"Proof is better than discussion."

"There is no teacher of Japanese poetry."

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THE CHERRY

By E. A. STURGE

The cherry is grown for beauty alone;
The fruit that is left behind
Is bitter and small, and not eaten at all;
The petals that whirl in the wind
Like beautiful snow, seem to say as they go,
When called by each summoning blast:
"A lesson we give to people who live,
That beauty like ours will not last."

Long ages ago, in old Yamato,
These blossoms that quickly fall,
Taught brave *samurai* to be ready to die
At once at their master's call;
To die by the sword for their feudal lord,
So cherries wherever they blow,
With fragrance they fill the air, while they thrill
The spirit of Yamato.

In *The Spirit of Japan.*

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THE CHERRY

by E. A. SELDON

The cherry is a tree for poetry to be:
The fruit that that is full painted
Is pulpy and small, but not certain at all:
The bright is it at *night* in the *wind*
Like pearlish snow, seem to say as they go,
When called by deep slumbering light:
A lesson we have to be slept upon here
That lovely like one well not last.

Lovely eyes were in my fancy
Those lips were that cherry red
Lovely pretty women to be seen in the
As once in such instance dell:
In this for the *world* for flesh could
So cherries represent this *place*
// In it dance they well are white they
The death of fancies

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LEGENDARY HEROES OF OLD JAPAN

ONE of the most ancient, as well as one of the most noted heroes of Dai Nippon is Nomi-no-Sukune, supposed to have been born two hundred years before Christ, and to have lived for three and a half centuries. The acts for which he is most famous took place during the reign of the Emperor Suinin (29 B. C.—70 A. D.), the most important, as to the prominence it has been given in Japanese minds, concerns also one Tayemano Kehaya, who became his opponent in the match which is said to have been the first wrestling bout which occurred in the land, where it has since become the national sport.

Tayemano Kehaya was known for his prowess and bravery, and about which he became a boaster, and challenged men far and near throughout the Mikado's Empire, finding none who was willing to meet him in weaponless combat.

Hearing this, the Emperor assembled his courtiers and asked, "Is there no one who is able to cope with this braggart?" Whereupon the name of Nomi-no-Sukune was mentioned, and he was at once summoned to appear before His Majesty and receive his orders. Tayemano was also sent for, and when the two arrived at the palace, they were ordered to wrestle in the presence of the sovereign.

An arena was made ready and the two took their places, with all the Court gathered to see the contest of strength. Tayemano, as his given name, Kehaya, implied, was an expert kicker, and depended upon the blows he was able to inflict with his feet to achieve the victory of which he felt assured. But Sukune, though he had not spoken of his power, was also skilled in that method of attack, and he succeeded in giving the first blow, which resulted in broken ribs for his adversary, and next administered a fatal stroke, winning great applause from the Emperor, who praised his valor and bestowed upon him the name *Koshieneta*, meaning 'the crushing of loin bones', and gave him also, all the domains owned by the dead and defeated Tayemano; and wrestling was ever after held in high favor, becoming eventually the national sport.

But Nomi-no-Sukune did not adopt it as a profession, having a liking for more elevating pursuits; and it is to him the honor is given of having prevailed upon the Emperor to abolish the custom of burying alive many of the retainers of a deceased person of high rank, for which he suggested the substitution of the clay figures which were first used at the death of Emperor Suinin's wife. Strange to say, Nomi-no-Sukune is better known for having instituted wrestling.

Another hero who is said to have lived, through several hundred years, is Urashima, the Rip Van Winkle of Japan, who disappeared in 477 A. D. and returned three and a half centuries later. His story is very fanciful and occurs in various forms among Japanese fairy tales and is well known to the children of his country.

Urashima was a fisher boy with a kind heart, and disliked seeing his playfellows torturing animal creatures to death, and often sought to rescue the victims. Once he saved a tortoise which he had to pay for in order to get it from its young tormentors, and carried it back to the

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sea, cautioning it not to be caught again.

Some time afterwards, when he had taken his boat far out for fishing, the tortoise came to him and offered, by way of expressing its gratitude, to show him the palace of the Dragon god; and Urashima, taking a seat upon the back of the tortoise, was carried away to visit the god of the deep, who received him with great pomp and ceremony.

While sojourning in the palace he met the daughter of the great Dragon, a beautiful princess, and the two fell in love and were married, Urashima remaining to make his home in this wonderful place where a year was but a day, and where age came not. But by-and-by he remembered that he had not for a long time seen his parents, and he proposed to his wife that he return to his native home to visit them. She gave her consent, and on bidding him farewell, entrusted to him a rare casket, which she said would enable him to return to her palace only upon condition that he did not open it, and Urashima departed promising her to obey the order strictly.

When arrived at his birthplace, to his great dismay, he found none whom he knew and none who knew him; the cottages were all changed; only the sea was the same. In his dispair he thought perhaps the casket which he carried might yield to him the secret that would restore to him the home which he had but so recently left, and raised the lid. A puff of smoke was whisked away from it toward the sea, and nothingness remained. But suddenly his youth was changed to old age; his hair was white and his figure bent and pitiful. The days he had spent in the Dragon palace had been long, long years upon the earth.

Kintoki is a youthful hero held up to Japanese lads as a model of strength and valor. He was the son of the "Old Woman of the Mountains," who had once been a beautiful lady; but having an unhappy love affair, had fled to the mountains of Ashigara and there reared her child.

For years the two were known only to the wood-cutters, who called the boy the "Wonder Child" because of his having from early infancy been able to accomplish great feats of strength, and also because he feared nothing, not even the wild animals of the forest, making playmates of the bears, the deer and the monkeys. Kintoki was also unusual to look upon, for he not only exhibited huge physical proportions, but his body was the color of blood, for it was said that his father had committed suicide in order to impart his own strength to his son.

One day as Kintoki wandered in the woods, he met the great warrior, Yorimitsu, who, being greatly struck with the extraordinary appearance and prowess of the youth, accompanied him to his mother and requested that he be allowed to have her son as one of his retainers. The mother considered this a most flattering offer, and willingly agreed, so off they went, Yorimitsu congratulating himself that he had secured the services of such a formidable fighter.

And the warrior was not disappointed, for Kintoki proved himself most useful. Yorimitsu was tormented by the spirit of a spider, and one-eyed monsters came to frighten the boy just taken into his service; but he fearlessly dispersed them, as he did other goblins by which they were annoyed. Kintoki's greatest success was won in the attack upon the demon, Shutendoji, in Mount Oye, Tamba Province, when that demon was slain and his head taken to the Emperor.

After the death of Yorimitsu, Kintoki was seen no more, and it is

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They were filled with curious people, some of them in the uniform of the Kyoto Police. Tokio Tomonaga's attention was attracted by a man who was standing in front of the Kyoto Hotel, and who was evidently a foreigner, but he could not see his face, as he was leaning over the balcony, and was apparently intent upon watching the people below. Tomonaga's curiosity was aroused, and he was about to call his friend Kyoichi Ito, who was standing by his side, to see the man, when the stranger suddenly disappeared from the balcony, and Tomonaga was left to wonder what had become of him. Tomonaga's curiosity was not satisfied, however, for he was called away to the telephone, and when he returned to the balcony he was unable to find the man who had aroused his curiosity

thought he must have returned to the mountains to live with his mother. Dolls representing him with a wood-cutter's ax and in company with a bear, are displayed on the occasion of the boy's festival, as emblematic of strength and valor.

Minamoto Tametomo was another marvel of physical prowess, an expert archer. His left hand was much longer than this right, and this gave him great advantage in handling his bow. He did not, however, possess an amiable disposition, and was the source of great annoyance to his father, who, after repeated efforts to control him, was compelled to banish him to the island of Kyushu.

Such was the military power of this extraordinay individual, that, at the age of fifteen, when expelled from his native province, he accomplished the subjugation of the chieftains of the island whither he was sent, and assumed the rule of their domains. Upon Tametomo's refusing to obey orders from the Emperor, his father was dismissed from service; and learning of the disgrace he had caused, the youth regretted it exceedingly, and with a party of his men proceeded to Kyoto to make amends.

When he arrived however, he found rival factions at war, and enlisting with one of them, fought bravely, but was defeated and obliged to make a hasty flight with his followers. He then landed at Oshima and succeeded in bringing the inhabitants under his sway, remaining there for some ten years.

Being attracted by the flight of a heron in a certain direction, he followed it and came to a far off land peopled with devilish creatures; but even these he overcame, and returned to Oshima bringing a number of them with him. They ravaged the country until the Imperial Court at Kyoto had to issue a mandate against Tametomo, and an expedition was sent out to oppose his forces and put an end to the difficulties.

Tametomo said to his men, "It would be very easy to defeat these soldiers and effect an escape, but then I would indeed be branded as a foe to the Imperial cause; *choteki*, a stigma I could not bear; so it is my intention to die by my own hand."

After sinking one of the Imperial ships with a single arrow from his mighty bow, the others were for the time withdrawn, but Tametomo retired to his residence and committed suicide. Another tradition there is which states that he merely feigned death, and subsequently disappeared from Oshima, going to Loo Choo, where he rendered aid to the king in quelling a rebellion and afterwards married the king's daughter, and his descendants ruled there up to the time of the Meiji era.

The hero of perhaps the best loved and most familiar of old Japanese stories, is Momotaro, born of a peach, but fostered by the poor humble peasants who had found the peach from which he stepped forth when it had been carried home. He proved so dutiful a son and brave a man, that huge statues of him are to be seen in schools, were stories of his wonderful adventures are told and the example of his filial piety and other noble qualities, is set before the children who greatly admire him. He protected the weak, destroyed many demons, released their victims, availed himself of their treasure and enabled his parents "to live in peace and plently to the end of their days."

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POTTERY AND POTTERS

I

WHAT is known as Kameoka ware is that exhumed in that part of northern Japan, and is the crude pottery of the aborigines who were displaced by the first continental immigrants. These latter also left in their burial mounds many examples of their pottery which were found to be hand-made, rough, unglazed earthenware of simplest unornamented forms. These probably belong to several centuries previous to and into the Christian era.

Belonging to a slightly more advanced period is the pottery found in the dolmens, and though still of crude workmanship, it had greater variety of form and possessed decorative features, there being vessels and vases with modeling in high relief; and a knowledge of the potter's wheel is evident in these specimens, though a Buddhist priest, one Gyogi *Bosatsu*, belonging to a much later epoch (670-749), is accredited with its invention.

These early specimens seemingly were used in burial ceremonies, and what are called *hani-wa*, or figures of men, women and horses made of baked clay, form a large part of the dolmen pottery, the first real industry in that line having been created by the demand for them, as they became a substitute at burials for human beings, buried alive with their lords, according to former customs.

Whether Gyogi was the first to use the potter's wheel in Japan or not, it is from his time that the making of pottery in Japan has a positive history. Gyogi was a Korean of Chinese origin, and reputed to have been learned in the teachings of Buddha and accomplished in various arts and sciences; an adept at wood carving, famed as a potter and skilled in engineering.

This kindly teacher traveled to many places in Japan, giving instruction in the crafts of which he possessed knowledge, but seems to have achieved the greatest fame for his work as a potter, though specimen products of his labor, or pottery which is attributed to be such, is hardly worthy of so great distinction, being "unsightly vessels of coarse, dark clay, with no trace of glaze other than that produced by the fusing of silicates accidentally present in the clay. and without any technical merit beyond a certain regularity of form due to the employment of the wheel in their construction." (Brinkley)

Articles for household use, utensils for religious ceremonies and jars for several purposes were made by potters of the tenth century in the following provinces: Izumo, Hizen, Harima, Settsu, Tamba, Sansuki, Awa, Choshu, Chikuzen, Chikugo, Ōmi, Mino, Owari and Mikawa. But this was unglazed ware, and not until the early part of the thirteenth century was the production of glaze accomplished and put into general use. This was done by Kato Shirozaemon, a potter who had traveled to China to learn the art, and who, after years of study there, returned to his native country and established himself in his new work at Seto, Owari Province. The main output from his workshop was tea jars, the which had been his first inspiration, as it was just previous to his going to China that tea had been introduced therefrom, together with the various objects used for containing and brewing it, and the finish of the Chinese pottery employed for the purpose, and then seen for the first time in Japan, was at once appreciated, and, as soon as the knowledge of

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producing it could be acquired, adopted by her potters.

Kato Shirozaemon used a reddish clay of a dark color, as was also the glaze, but more of a brown, with traces here and there of another hue. His pottery became known as Seto ware and so enthusiastically was he followed by other potters, that the term was soon applied to all Japanese pottery. So highly was its originator esteemed by the public that he was deified and worshiped as the 'god of kilns,' and a temple was erected in his memory where festivals are celebrated twice yearly. He is also called the father of pottery.

For several hundred years afterwards little development in the potter's art was achieved, the exquisite glazes and colorings of Chinese ware being but admired wonders to the Japanese, and not one of whom, till Gorodayu Goshonzui (1510), undertook to learn anything of its technical nature. Of this potter little, except that he was a native of Ise, is known as to his history before he went to China, where he studied the art of under-glaze decoration and the methods used by Chinese potters; he returned after five years and settled in Arita, Hizen Province.

Porcelain clay was not then known to exist in Japan, and Goshonzui had brought with him from China all the necessary materials for making the ware he had learned to produce, included in which was a quantity of the wonderful Mohammedan blue used in the decoration, by which his pieces may be distinguished from the reproductions which were made after a demand arose for the first porcelain made in Japan, though not of Japanese clay.

His supply of materials did not last very long, and the discovery of the same in the very vicinity in which he worked, which afterwards made it the centre of the porcelain industry in Japan, did not occur until long after Goshonzui's death. The motives used by him were of both Chinese and native design, floral patterns predominating. The ware he produced was not the delicate kind made in China, but heavier, and the things were such as censers, water jars, tea jars, cups and plates, which steadily increased in estimated value, and have been treasured in various collections by native connoisseurs.

The next step in the direction of advancing the potter's art in Japan came after Hideyoshi had established his rule, and undertook to promote industrial arts. A ware called *Soshiro-yaki*, highly approved by him, was made at Fushimi, near Kyoto, by one Soshiro. It was an unglazed, but finely polished biscuit ware of a rich cream color, having black, red or gold lacquer decoration, specimens of which remain, in the form of tea jars and incense burners.

The *Taiko* possessed many splendid examples of the potter's art from China, which had come to him as princely gifts from the Middle Kingdom, but this by no means satisfied him; it only served to stimulate his desire to see the craftsmen of his own country create objects of similar merit.

To that end he gave an order to his generals who were being sent in charge of an expedition to Korea, that they should bring with them, on their return, as many expert Korean potters as possible. In obedience to this command, eventually potteries were established in various parts of Japan, Kyushu in particular, by the Korean potters thus obtained, and the Japanese began their real training in the art, the results of which brought fame to their country throughout the world; but Hideyoshi had passed away before much had been achieved in the attainment of what he sought for

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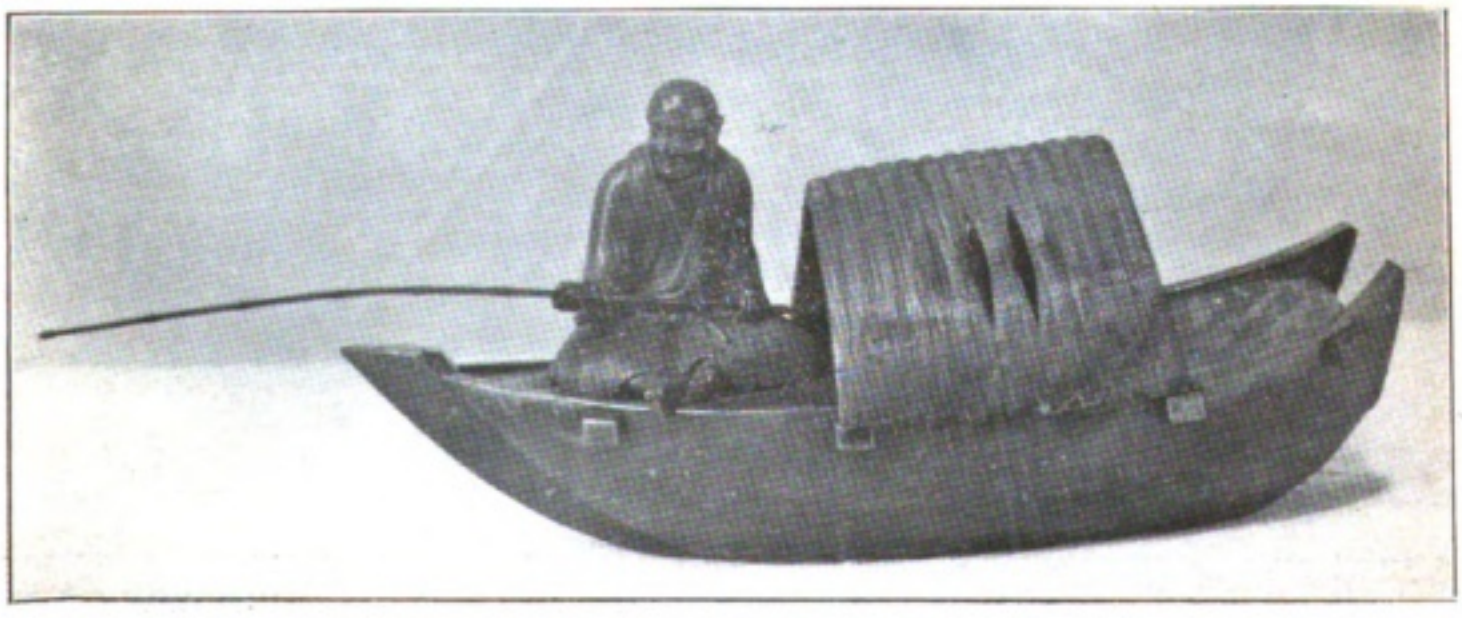
INCENSE BURNER — SETO WARE

INCENSE BURNER — AWO IMBE WARE



OKIMONO — IWAMI WARE

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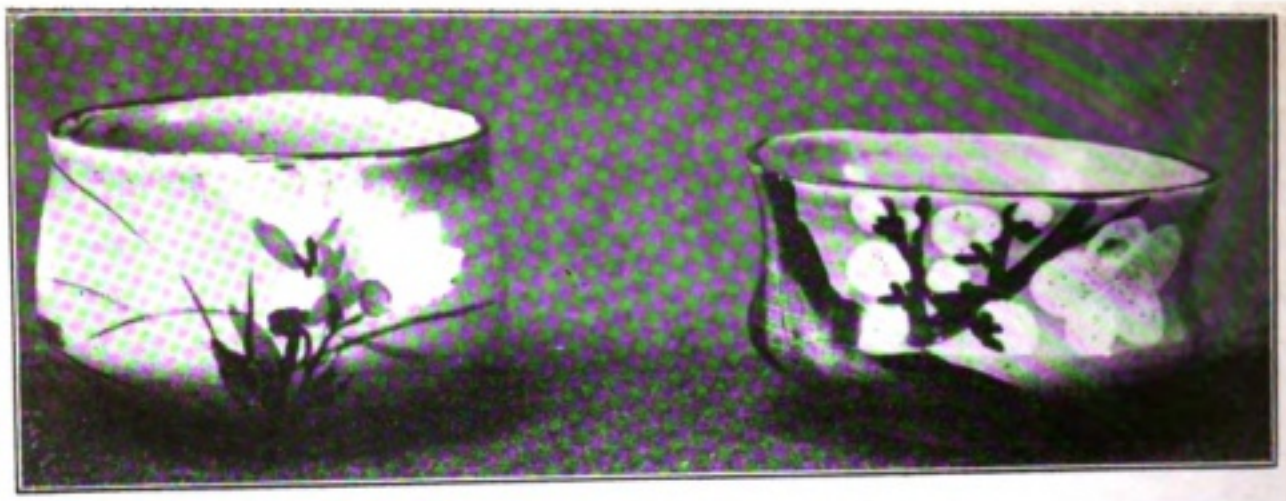
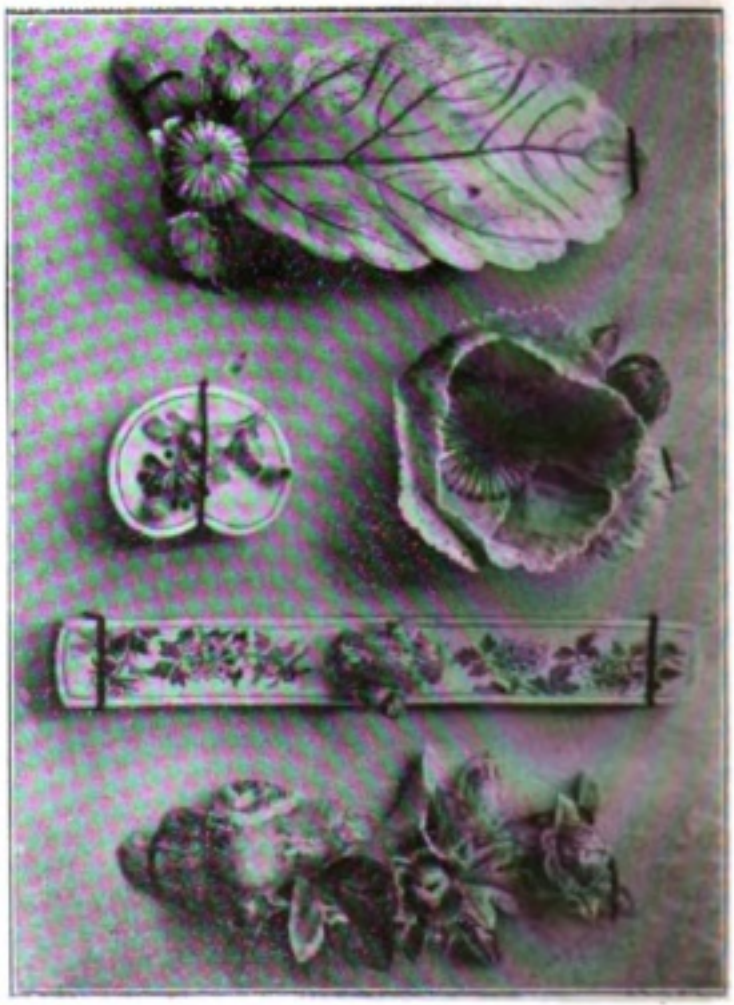


TEA BOWLS BY KENZAN — KYOTO WARE

LARGE PLATES — ARITA WARE

WATER JAR — AWATA WARE



WRITING SET — SATSUMA WARE

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Japanese potters.

The first Japanese pottery of a specific kind to become an industrial product was the famous *Raku* ware made at Kyoto since the second quarter of the sixteenth century. Its originator was a Korean potter who came to Japan about 1525, married a Japanese wife, and began the making of a ware which was called *So-kei-yaki*, but which had little to recommend it. Upon his death, in 1560, his wife took up the work which she accomplished with sufficient skill and art to attract the attention of the then great *cha-no-yu* authority, Rikyu. The ware made by the wife, and subsequently by the son, was known as *Ama-yaki*, and the son, Chojiro, succeeded in obtaining an order from Nobunaga, which made the ware popular, and it later attracted Hideyoshi's attention, and he granted Chojiro a gold seal inscribed with the name *Raku*, which was permanently adopted as the name and seal of this pottery, made by successive members of the family down to the present time.

The early examples of *Raku* ware were hand made, with a black glaze, which was changed later to a light red. The shapes were those best suited to the tastes of the masters of the tea ceremony, simple but odd. Light yellow, black marked with red, green, cream and varigated crackled glazes have been used upon *Raku*, and gold was used for decoration by one of the *Raku* potters. The most famous of these was the fourth in descent, who is known by two names other than that used in his industry: Doniu and Nonko.

The method of making *Raku* has caused many pieces to show tong-marks, which disfigure them in the eyes of the connoisseur, but which, under the name *Hasami-yaki*, 'tongs ware,' receive the admiration of the unknowing.

Among Hideyoshi's generals in Korea was Prince Nabeshima, a *daimyo* of Hizen Province, and upon his return to Japan (1598), the Koreans he brought with him established potteries in several places in Hizen, and the wares produced from this time onward, by the subsequent generations of these potters are *Imari-yaki*, *Nabeshima-yaki*, and *Hirado-yaki* upon whose excellence and beauty rests the fame of Japanese porcelain.

The discovery of porcelain clay in Japan is said to have been made in the year 1605, by a Korean potter named Kanagai Risampei, in a hill called Izumi-yama, near Arita, and it was at this place that *Imari-yaki* was made, the name of the ware having fallen upon it because it was shipped from the near by port of Imari. So that the manufacture of the first real Japanese porcelain began at that time, and the potters who, a little later, came into prominence on account of their admirable work in the new porcelain, were Takahara Goroshichi and Sakaida Kakiemon.

The decoration of this early porcelain was chiefly blue, of the under-glaze variety, though it was lately discovered that they also understood and used vitrifiable enamels. The latter mode of decoration was, however, very rudimentary until Kakiemon learned something more of the Chinese method of applying it, from a Chinese official whom he met in Nagasaki. After this time, or about 1650, Imari ware became much improved in both technical and decorative qualities, having a biscuit of fine texture, a soft, white glaze and chaste ornament.

What is known as "Old Japan" is the Imari ware which was produced according to foreign ideas for commercial purposes, the old Dutch traders considering the then sparsely decorated ware of the

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Arita potters unattractive. This is profusely decorated with enamels over the original blue under-glaze pattern, therefore requiring the piece to have been twice fired, which process robbed the glaze of some of its beauty, and often extended its detrimental effects to the blue decoration.

"If to floral subjects, scrolls and diapers are added the mythical phœnix, dragon, unicorn and lion, landscapes in medallions or panels, and figures of women in sweeping robes or of warriors in brightly pointed armor, a complete catalogue is obtained of subjects from which the Arita potter made his choice. The dominant colors of his pieces in those early days were blue and red; the former under the glaze, the latter over it. The quality of red in all specimens of good Imari ware deserves careful attention. The rich, soft color of the ancient keramists is no longer present, except in special cases: the common red of modern potters can be compared to nothing but sealing-wax. Gold was used in some profusion during the early period, and, indeed, has always been used. Gold scrolls on a blue ground, phœnixes with gilded feathers, flowers with gilt petals, and leaves with gilt veins are commonly found. The result of all these modifications was eminently satisfactory to the Dutch, who exported large quantities of the brilliant ware." (Brinkley)

In 1660 the feudal chief of Hizen interested himself in a pottery which had been opened at Okawachi, where wares for official use were being made, and desiring to have produced a porcelain of exceptional merits, he not only contributed largely in funds for the expense of conducting the work, but instituted the custom of giving expert potters a certain rank. The sale of the ware, which was called *Nabeshima-yaki*, was strictly prohibited, so that the entire absence of any commercial aspect, rapidly raised the standard of the work to that of pre-eminence among Japanese enamel-decorated porcelains.

Although the materials for this porcelain were brought from Arita, both the paste and glaze of *Nabeshima-yaki* are superior to that of Imari ware, and the decoration is in accordance with pure Japanese taste, being delicate and unobtrusive, mostly of floral designs, under-glaze decoration seldom being used. Besides this porcelain, the *Nabeshima-yaki* included exquisite *Seiji*, closely resembling the Chinese production which is so like jade.

The decoration, which is blue only, is exquisite in design, execution and color; having a wide range as to the first, embracing nearly all the subjects used by the potters of that time; but the tone of color was usually of a pure, clear blue, not found in any other ware. Many pieces are remarkable for their delicately modeled figures of children or animals.

Like Nabeshima ware, *Hirado-yaki* was made only for the private use of its promoter, its sale not being allowed, and very few pieces are marked, and few have passed into foreign collections.

(*To be continued*)

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SHIPBUILDING IN JAPAN

THAT some form of vessel was known in Japan since pre-historic days, is implied from the fact that mythological legends say that one of the gods was banished and sent out to sea in a boat called *amano-iwakusu-fune*. Emperor Jimmu (660-585 B. C.) is said to have proceeded from Hyogo to Settsu with his warriors, in vessels, and an account is given of a ship one hundred feet long being built and launched at the order of Emperor Ojin (270-310 A.D.), though nothing is related as to the method or kind of construction; but there seems reason to suppose that camphor trees were used as material.

Even as late as the beginning of the seventeenth century, when Japanese merchant ships visited the Philippines, Siam and Mexico, no record was made as to the structure of their ships, but since Portuguese and other foreign vessels had reached Japan by that time, it seems not unlikely that the Japanese had acquired from Europeans knowledge of constructing sea-going vessels.

The largest Japanese junk was called *sengoku-bune*, signifying its capacity for one thousand *koku*. Such a boat had one sail composed of three hundred and twelve pieces of matting, from sixteen to eighteen oars, and an iron anchor with eight flukes, weighing about five hundred pounds.

Ship carpenters lived in fishing villages, and their trade was made hereditary, whatever knowledge was gained from experience by the father, being taught the son, and so handed down from generation to generation, the science of the art being entirely unknown to them.

Shortly after the Japanese had learned to build ships worthy the name, the Tokugawa Government interdicted all intercourse with the outside world and prohibited the construction of ships of large size, thus preventing any further progress in the art.

After the arrival of Commodore Perry in 1855, when the Government was made to realize the necessity of creating a navy, the first thing that had to be done was to revoke the interdiction against building ships of large size, and immediately ships fashioned after European models began to be built both by the Government and various clans in different parts of the country, among which may be mentioned first of all that built at Uraga by the Government, a two-masted vessel of the schooner type, one hundred fifty feet in length; several three-masted sailing vessels by Satsuma men, and a similar vessel built at Ishikawa-jima by the Mito clan.

In 1854, a Russian man-of-war was wrecked off the coast at Shimodo, by a tidal wave, and her crew of five hundred set about building vessels that would carry them back to their own country. Japanese carpenters and blacksmiths were engaged to assist them, and the work was accomplished at Kimizawa, of the same province, being completed the following year, when the Russians sailed for Vladivostock in the two schooners.

The artisans employed by the Russians made the best of their opportunity and were able to undertake work on their own account, and this it was that enabled the Tokugawa Government to construct vessels of the same type (which became known as the Kimizawa) by employing natives only, and these men formed the first working force in the naval dockyard

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SHIPBUILDING IN JAPAN

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subsequently established by the Government at Yokosuka.

During the same year that the Russian man-of-war had been wrecked, the Tokugawa Government had asked the Netherlands to send to Japan several instructors, who were to take charge of of a training school for naval cadets. These men brought as a present from the King of the Netherlands to the Tokugawa *Shogun*, a war vessel, which was renamed *Kwan-ko Maru* and stationed at Nagasaki. becoming the training ship upon which a number of young men selected by the Government were placed under the new foreign instructors, to study navigation and naval science.

In 1857, the Government established iron works at Nagasaki, ten experts in naval architecture and engineering being engaged from Holland to supervise the undertaking, and necessary machinery was imported from that country. This made it possible for Japan to keep in repair the ships she had acquired and to begin instruction in the art of shipbuilding.

A little later (1864) the Government arranged for a shipbuilding yard at Tategami, where men-of-war could be built, but only small merchant steamers were undertaken until the beginning of the Meiji era.

Graduates from the Nagasaki training school had been sent to the Ishikawajima dockyard, in Yedo (now Tokyo), to undertake the building of a ship of foreign model ordered by the Tokugawa Government. It was launched in 1864 and named the *Chiyodagata Maru*, being the first steamship built by Japanese experts and workmen. It was of wood, one hundred four feet long, sixty-horse-power engine, and one hundred thirty-eight tons.

Both Nagasaki and Ishikawajima were unsuited for the building of ships of very large size, being far too limited in scale, so in 1864 the Government decided to build a large naval dockyard at Yokosuka, and through the French Minister secured French naval architects and machinery, and the work was begun in 1866. M. Veny, engineer, directed the undertaking at a salary of four hundred dollars per month, while his first assistant was paid three hundred. The work was not completed until after the Restoration, being finished by the new Government, 1871, and has since been made by it the greatest naval dockyard in Japan.

The original equipment consisted of sixteen machines and fifty furnaces for casting and refining. One-hundred eighty-horse-power engines were employed.

The Department of Public Works took charge of the Nagasaki iron works and shipyard in 1871 and greatly enlarged its scope, adding a dry-dock and making other extensions.

The new Government established another dockyard at Kobe, in 1874, to be used for repairing; ten years later both the Nagasaki and Kobe dockyards were disposed of by the Government, the former being purchased by the Mitsu Bishi Company, and the latter by the Kawasaki Shipbuilding Company, which two concerns have become the most important ones of the kind in the Far East. Other shipbuilding companies worthy of notice are the Osaka Iron Works, the Uraga Dock Company, and the Yokohama Dock Company.

Up to 1877, however, all the steamships used in carrying trade were foreign built. At this time the Government began the construction of war ships at Yokosuka, and an increased demand for steamers in carrying trade in the Inland Sea encouraged the building of wooden vessels for that purpose in Japanese

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IMPERIAL JAPANESE MAN-OF-WAR IN KAWASAKI DOCK

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"THE MINNESOTA" IN MITSU-BISHI DOCK

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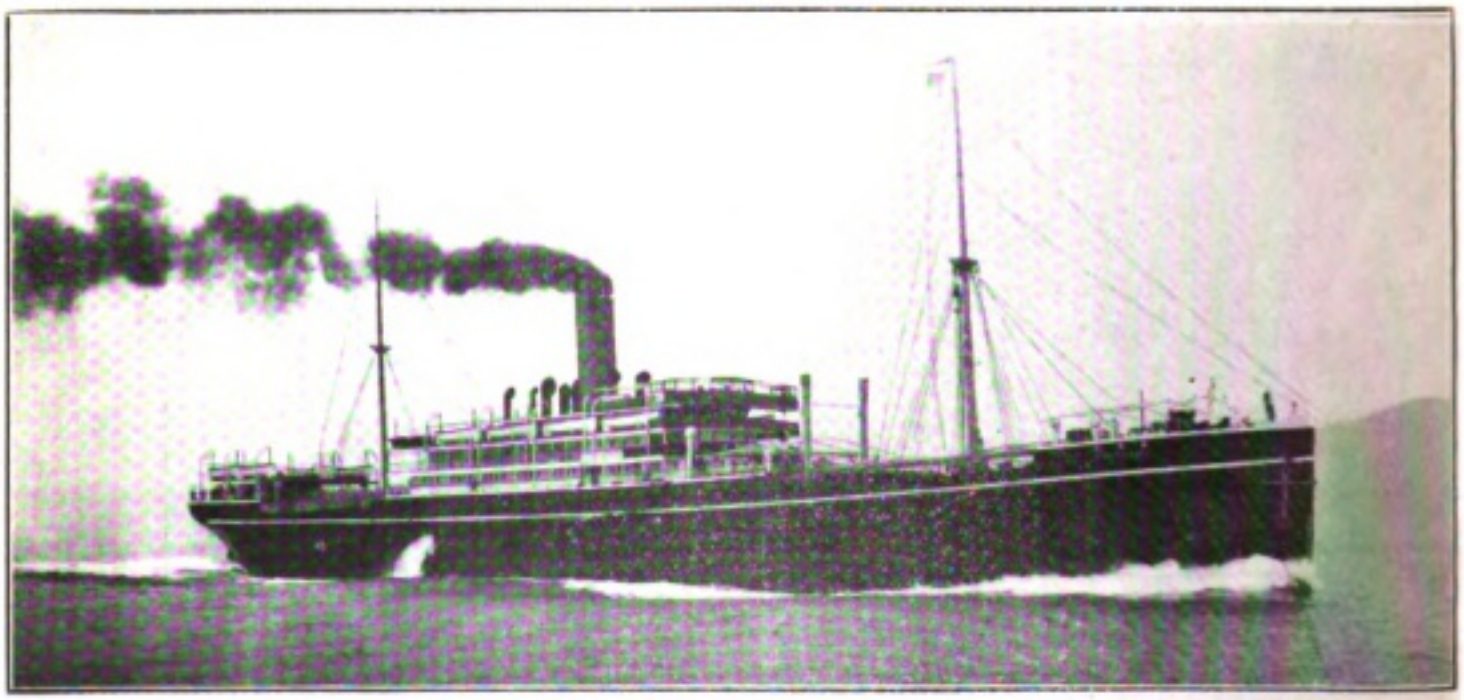
"CHIYO-MARU," BUILT AT MITSU BISHI DOCKYARDS, NAGASAKI



"MISHIMA-MARU," BUILT AT KAWASAKI DOCKYARDS, KOBE

LAUNCHING THE "SHUNYO-MARU," MITSU BISHI DOCKYARDS, NAGASAKI

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docks, and such progress was made in the industry, that the steamers required were entirely supplied from Osaka, Nagasaki, Kobe and Tokyo shipyards.

In 1897 the Government issued an order prohibiting the building of Japanese junks larger than five hundred *koku* capacity, on account of their not meeting the requirements of the time. This gave a further impetus to shipbuilding of a foreign type. In 1890 three steel steamers of seven hundred tons each were launched at Nagasaki, and the construction of similar ones was at once undertaken at other docks.

It had not been found possible, however, to build men-of-war of superior quality, and these were ordered from England and France, and steel and iron materials required for building Japanese steamers had to be imported from England and America.

But after the war with China, shipbuilding in Japan made sudden strides when the Government promulgated regulations for the Encouragement of Naval Architecture and Navigation (1896). A steamship company, the Nippon Yusen Kaisha, organized a European line, with plans for six steamers of six thousand tons each, one of which was completed by the Mitsu Bishi Company, at Nagasaki, 1898, at that time the largest steamer ever built in Japan. With the completion of the well equipped arsenals and the general progress in shipbuilding, Japan was now able to build first class men-of-war, still using steel and iron from abroad, but later a large iron manufactory was established at Edamitsu, Chikuzen Province, and there is now in course of construction a steel foundry of the most improved plan, at Muroran, Hokkaido, the president of which is former Vice-admiral Yomanauchi Masuji, of Kure Naval Station. So it is hoped, that in the near future Japan will be entirely independent of foreign countries for her supply of iron and steel materials for the manufacture of war ships.

Previous to the enactment of the Shipbuilding Encouragement Law, the largest ship made in Japanese dockyards did not exceed fifteen hundred tons with a speed of twenty-one knots, while since then steamships of above thirteen hundred tons and a speed of twenty-one knots have been made. In 1908 a partial amendment of the above mentioned law limited the grant of subsidy to steel ships of more than a thousand tons, the amount of subsidy ranging from five to ten dollars per ton.

In 1903 the Uraga Dockyard began the construction of five gunboats for the United States, to be used in the Philippines; the Mitsu Bishi Company built six steel steamers of from two to six thousand tons, and the Kawasaki Company built four steel ships, total tonnage eighteen thousand.

The *Tenyo Maru*, an ocean liner of the Imperial Japanese mail service belonging to the Toyo Kisen Kaisha, was built at Nagasaki by the Mitsu Bishi Company, in 1907, and is equal in every respect to any made in other countries. It is of steel, with double bottom throughout, bunkers for petroleum used as fuel, twelve water-tight compartments, Parson's turbine three-axle engine, and cylindrical, single opening boilers; its tonnage is 13,454 all told, and speed 20.35 knots at half load. There are three decks, accommodation for 261 cabin, 47 second class, and 816 steerage passengers.

The great increase in the number of shipyards after 1896 brought the number from less than forty up to two hundred forty, with fifty-five docks, in 1909.

The following statistics show the

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development of shipbuilding in Japan since 1870.

Year	Steamers No.	Steamers Tonnage	Sailing vessels No.	Sailing vessels Tonnage
1870	2	[illegible]	—	—
1871	5	115	1	50
1872	0	[illegible]	—	—
1873	2	32	1	77
1874	3	[illegible]	—	—
1875	14	[illegible]	4	[illegible]
1876	8	149	11	[illegible]
1877	[illegible]	[illegible]	19	[illegible]
1878	[illegible]	[illegible]	[illegible]	[illegible]
1879	10	[illegible]	50	[illegible]
1880	[illegible]	[illegible]	150	[illegible]
1881	[illegible]	[illegible]	107	[illegible]
1882	27	[illegible]	[illegible]	[illegible]
1883	31	[illegible]	[illegible]	[illegible]
1884	14	[illegible]	19	[illegible]
1885	19	[illegible]	10	[illegible]
1886	16	[illegible]	23	[illegible]
1887	18	[illegible]	[illegible]	[illegible]
1888	[illegible]	[illegible]	15	[illegible]
1889	[illegible]	[illegible]	18	[illegible]
1890	[illegible]	[illegible]	[illegible]	[illegible]
1891	[illegible]	[illegible]	[illegible]	[illegible]
1892	32	[illegible]	8	[illegible]
1893	20	[illegible]	[illegible]	[illegible]
1894	[illegible]	[illegible]	10	[illegible]
1895	[illegible]	[illegible]	[illegible]	[illegible]
1896	[illegible]	[illegible]	11	[illegible]
1897	57	[illegible]	16	[illegible]
1898	[illegible]	[illegible]	[illegible]	[illegible]
1899	[illegible]	[illegible]	[illegible]	[illegible]
1900	[illegible]	[illegible]	[illegible]	[illegible]
1901	71	[illegible]	[illegible]	[illegible]
1902	97	[illegible]	[illegible]	[illegible]
1903	[illegible]	[illegible]	[illegible]	[illegible]
1904	113	[illegible]	113	[illegible]
1905	105	[illegible]	[illegible]	[illegible]
1906	[illegible]	[illegible]	[illegible]	[illegible]
1907	79	[illegible]	[illegible]	[illegible]
1908	[illegible]	[illegible]	[illegible]	[illegible]
1909	[illegible]	[illegible]	[illegible]	[illegible]

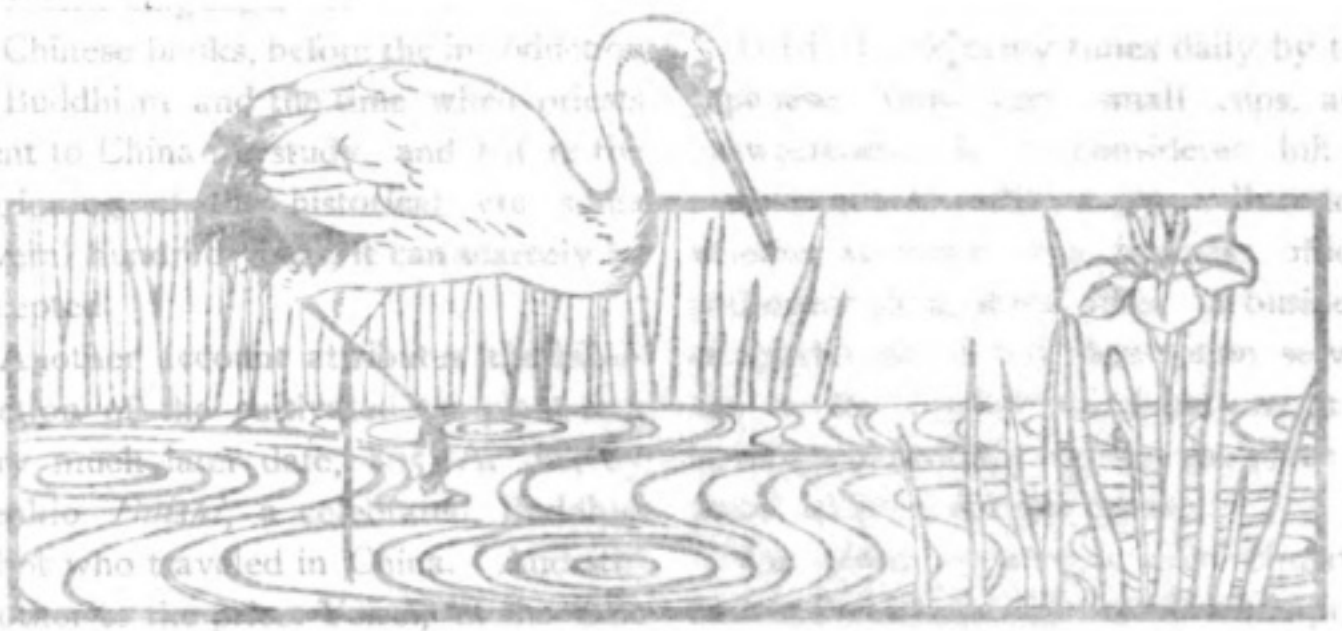
The [illegible] is the registered total tonnage.

The armored cruiser *Kurama*, which has been dispatched to attend the ceremonial naval review at the Royal Coronation in England, was launched at Yokosuka Dockyard in 1910. It is of 14,620 tons.

The battleship *Settsu*, of 20,800 tons displacement, was launched in March of this year (1911) in the presence of His Imperial Highness, the Crown Prince. It is of 25,000 H. P., 20 knots speed, and is 526 feet long and 84 feet wide.

The *Tsukuba*, launched at Sasebo last month, is a cruiser of the most improved type, intended to be used as a scout ship. Its displacement is 4,191 tons, speed 26 knots, H. P. 22,500, or nearly four times the displacement, the skillful use of the steam turbine having made such a result possible. It is 475 feet long and 46 feet 6 inches wide. The *Tsukuba* is now the pride of the Japanese Navy.

Such progress has been made in the shipbuilding industry within the course of a decade or so, that Japan is now not only able to construct her own steamships and war vessels, but is able to undertake the same for other countries.



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development of shipbuilding in Japan since 1870.

Year	Steamers No.	Steamers tonnage	Sailing vessels No.	Sailing vessels tonnage
1870	2	57	—	—
1871	5	115	1	50
1872	6	78	—	—
1873	2	32	1	77
1874	3	64	—	—
1875	14	462	4	83
1876	8	146	11	639
1877	16	474	16	1,649
1878	24	886	51	5,204
1879	19	839	50	5,781
1880	41	3,193	150	10,931
1881	38	2 097	107	9,477
1882	27	1,884	73	8,175
1883	31	3,411	32	2,790
1884	11	1,338	19	2,889
1885	19	1,529	16	1,921
1886	16	1,128	23	1,485
1887	18	1,440	23	1,633
1888	26	2,696	18	1,348
1889	26	2,269	18	1,300
1890	30	6,868	13	1,213
1891	33	5,395	6	808
1892	32	5,944	8	688
1893	26	3,967	4	459
1894	33	5,847	10	1,311
1895	47	8,977	6	951
1896	36	5,860	11	1,061
1897	57	10,698	18	2,472
1898	54	13,929	202	20,836
1899	53	18,157	216	20,342
1900	53	15,308	193	17,873
1901	71	31,829	202	20,259
1902	67	16,328	137	13,035
1903	65	33,612	124	9,925
1904	114	27,500	119	11,275
1905	103	30,089	278	16,760
1906	90	35,151	411	26,444
1907	79	29,898	248	19,949
1908	77	68,070	192	14,607
1909	68	50,795	198	15,188

Note:—The tonnage given above up to 1889 is the registered total tonnage.

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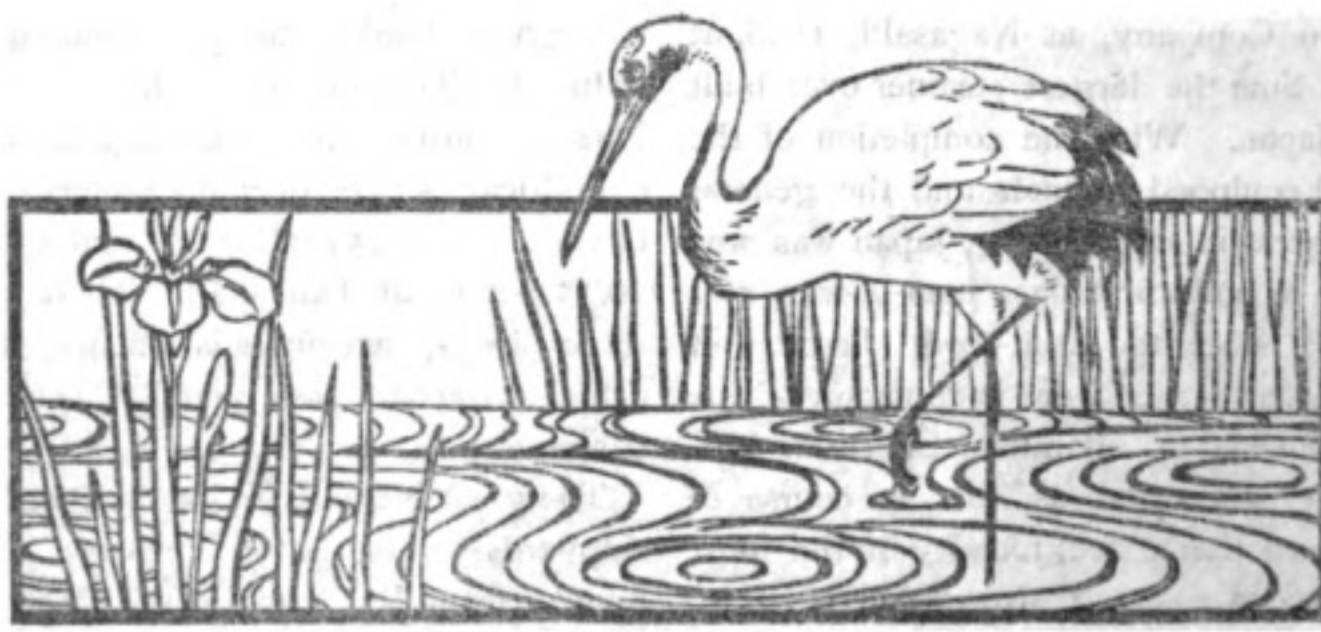

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THE CULTIVATION OF TEA

TEA grows wild in many mountain districts in Japan, notably in Hiuga, Higo and Iyo, but a beverage prepared from the wild green tea is not palatable, being too bitter in taste; but in some places it is gathered and manufactured into black tea. Several different accounts are given by various writers, as to the time when the tea which became a staple product in Japan, was introduced from China; but all agree that it was brought back by a priest or priests who had been to that country for the purpose of study.

It is stated in "Japan By The Japanese," that the cultivation of tea originated some two thousand years ago, when Japanese priest visited China and returned with seed of the tea plant; and that the first mention of tea in Japanese history refers to the kind called *hiki cha* being served to one hundred priests assembled to read one of their books, guests of the Emperor who reigned 131-192 A. D. Now as this was before the Japanese had a written language, before the introduc- of Chinese books, before the introduction of Buddhism and the time when priests went to China for study, and before the beginning of the historical era some several hundred years, it can scarcely be accepted.

Another account attributes the introduction of the cultivated tea plant to a very much later date, 805 A. D., by Denkio *Daishi*, a celebrated Buddhist abbot who traveled in China. And still another to the priest Yeisei, at the time of Emperor Go-Toba, 1186-1198, who returned from China with tea which he planted at Hakata, in the province of Chikuzen, and this fact is clearly stated in authentic Japanese history. Later, he sent tea seed to Myokei, a priest of Yamashiro Province, who planted it at Uji, a village not far from Kyoto, where the soil was so well adapted to the requirements of the plant, that the most excellent results were obtained, and Uji is now famed for her fine tea gardens, producing the best tea in Japan. During the Tokugawa Shogunate, Uji was known as Chadokoro, or Tea District, and the Government granted special privileges to families there which had been engaged in the cultivation of tea for several generations.

Some of the best tea was always sent to the Mikado's Court at Kyoto as an offering, and it was also the custom to supply that for the personal use of the *Shogun*, it being forwarded in a tea case called *chatsubo* handed down from ancestors, and when it was carried to Yedo, even the *daimyo* who chanced to be on the road were obliged to make way for the tea caravan.

Tea is drunk many times daily by the Japanese, from very small cups, and unsweetened. It is considered inhospitable not to offer every caller tea, whether at home or a business office, and every shop, store, office, or business establishment of any description serves tea to its employes and patrons, the beverage practically taking the place of water which is seldom drunk.

The plant requires a mild climate, and that which has the best flavor is produced on hilly ground having firm, dry soil; for, though it grows more luxuriantly under different conditions and in more

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fertile soil, the tea manufactured from such leaves does not make as pleasant a beverage.

The seed may be sown directly in the garden in which it is to grow permanently, or elsewhere and later be transplanted to the garden. In Japan it is usually sown in the garden in April, though sometimes in autumn, the ground having been thoroughly ploughed and manured previously. After a month's time the plants appear, and during the summer the roots are covered with straw to prevent drying, and in the same way the plants are protected from frost in winter. For three years they are given care to keep them clean and flourishing, and for choicest quality, the bushes are sheltered from the hot sun, by matting. No leaves can be plucked until the spring of the fourth year.

After the plants have attained that age they are plucked yearly, in many instances twice, but rarely three times during one season. The plucking is done in early spring when the young shoots have put out just four leaves, three of which are culled, leaving one new leaf. After about a month's time a second gathering may be had, after which the bushes are generally pruned into a uniform round shape to facilitate the next year's work.

In small gardens the plucking is only undertaken in pleasant weather, but on extensive plantations, such as those in Uji, no such rule is observed. It is mostly accomplished by girls and women anywhere from fourteen to fifty years of age, who flock to the districts at the beginning of the season, from all the surrounding provinces for miles. They are called *tsumiko* and a e especially garbed for the work, wearing black garments without the regulation long sleeves, black gaiters, black or white *tabi* or cloth socks, black hand coverings, and cotton towels arranged over their heads. They carry suspended from their necks, round baskets about eighteen inches deep and wide, which usually bear the family crest of the planter, who is, in case of a small garden, also the manufacturer.

These tea gatherers begin at daybreak and work until sunset. They are paid according to the weight of the amount gathered, the contents of the baskets being weighed by the *banto*, or overseer as each is filled, and the amount entered in his book. The best and most experienced pickers are able to earn thirty or thirty-fiev cents for their fourteen hours labor.

Each morning the overseer inspects the bushes and tags those which are to be plucked. The work is done from the lower part of the bush upward. The plantations at Uji are so large that no second picking is resorted to, and the first leaves being the best, Uji tea is superior to other likely to be made from the second growth.

The work of picking continues for about a month, sometimes longer. On the last day, at Uji, before the laborers disperse, they are given a farewell dinner, on which occasion the master also gives them some bonus in addition to their earnings, and general good humor and exchange of best wishes to meet again the next season prevails. So much for the planting and plucking.

No less important than the cultivation of the plant is the cultivation, or developing treatment, bestowed upon the leaves after they are gathered. They are first placed in a sieve and all foreign particles removed, then they go into the steaming basket called *seiro*, over a large kettle of boiling water, to be steamed for a short time, during which the cover is removed once and the leaves stirred with a pair of long chopsticks.

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After cooling, they are scattered in a paper-lined wooden tray called *hoiro*, in which they are placed over a charcoal furnace and while being dried are rubbed between the hands of the workmen, called *hoiroshi*; this operation rolls the leaves and keeps them at an even temperature. As the process of twisting continues and the moisture is driven off, the leaves gradually assume a blackish color and at this stage the tea is called *shinaage*. It is then subjected to a higher temperature and when thoroughly dry takes on a greenish hue. It is again fired at a lower temperature and again rubbed between the hands, when it is then ready for home market. This is the process of manufacture of the green tea commonly used by the Japanese.

Tea growers and manufacturers employ from ten or fifteen to a hundred laborers, according to the size of their plantations; but the majority of gardens and factories are small and the work of plucking and firing is often accomplished by the family, and their special brand bears any name which they may choose to call it.

The cultivators of tea on a large scale, usually sell the crop, when gathered, to a manufacturer or to a middleman; when fired, it is sold to wholesale merchants, who in turn sell it to export agents, at Yokohama, Kobe or Nagasaki respectively the largest tea shipping ports. Among tea exporting firms in Yokohama there are thirteen English, eleven American, three German, but only two Japanese firms.

The choicest Japanese tea is consumed at home, the price of the superior qualities being from two dollars and a half to three fifty per pound. The tea exported in such quantities to the United States and Canada is mostly the second and third crops colored with indigo and powdered with gypsum to give it the appearance which Americans have considered desirable; in Japan this tea is worth but ten cents a pound, but it is generally retailed in America at from forty to sixty cents.

Before shipment the tea is stored in godowns, where it receives a final firing before becoming a ship's cargo, to insure absolute dryness, for inferior grades of tea lose their flavor very quickly if allowed to become damp. This firing is conducted on a large scale, several hundred workmen being employed, who live in various villages some miles out of the city, but who may be assembled on short notice to fire a consignment ordered rushed.

They must stand all day, from six in the morning, over the brick furnaces with glowing charcoal fires and iron pans, stirring the tea leaves with long chopsticks, stopping only to eat their rice, which they bring already cooked, and drink their tea which they make in their own pots. For their day's labor over the scorching pans, they receive from fifteen to seventy cents, according to their skill.

Coloring the tea is called "polishing," and this is done at the last firing, when it is coated with indigo or Prussian blue. The powder is sprinkled in the pans, then the leaves are put in and stirred constantly until the color is evenly distributed, the workers who handle this process showing arms that are dyed blue to their elbows.

Important individuals in the employ of tea merchants are the tea-tasters, who are always busy during June, July and August testing samples of tea, and upon their decision the price of the tea is determined. "Over and over the tea is tested by sample infusions and the leaves carefully inspected. All summer, at the exporting houses, the tea-tasters are busy with their rows of white cups. A cer-

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tain weight of leaves is put into each cup, the boiling water is poured on and allowed to stand for five minutes. The expert notes, meanwhile, the color of the liquid and the aroma, carefully watches the unrolling of the leaves, and then tastes the brew by slow sips, meditatively, discriminatingly. The tea-taster takes care to swallow very little, as its effects are disastrous in time. Tea-tasters as a rule follow their business but a few years, severe nerve and stomach trouble being brought on by the constant sipping of so much stimulant. Of course they command high salaries. Astonishing stories are told of the acuteness of their sense of taste and the certainty of their judgements."

The chief difference between green and black teas is that the former is fired when freshly picked, thereby preserving in it, full strength, the theine, or stimulating element; while for black tea the leaves are allowed to ferment for a week or two, before they are fired, which greatly diminishes the theine property, and renders an infusion from them less harmful to the nerves. This process changes the color of the leaves to a dark red, and when fired they become quite black.

The American trade in green tea now practically monopolized by Japan, was formerly supplied by China, but the Japan product was cheaper and quickly became a substitue for Chinese hyson and gunpowder teas in America, but has never become popular in Europe, where Ceylon, India and China teas are favorites.

Great fortunes were made in Japan tea in years past, but ways and means have changed, and now only moderate profits are made by tea merchants.

When the import duty on tea was removed by the United States, in 1872, the price of tea suddenly rose and the increased demand for it was such as to bring about gross adulteration, which resulted in a reaction in the opposite direction, and the merchants lost heavily by the relapse in the trade.

About this time an experiment was made by the Government in manufacturing black tea, Chinese workmen being brought over, and Japanese being sent to China to study the preparation of black tea, but it did not prove a commercial success. 1878 saw an another decline in the export trade, and the following year a convention was held in Yokohama to make plans for the encouragement of the tea industry, which was followed by a remarkable improvement and rise in the demand, only to be again abused by adulteration, completely shattering the tea merchants' reputations. The Government then sought to form a syndicate and make regulations for the punishment of the guilty ones, and later granted a subsidy of thirty-five thousand dollars for central organization, and established offices in New York, Chicago and Vladivostock, and a great effort was made to insure a good quality in export tea.

Circumstances had caused the United States to legislate against the importation of tea of inferior quality, and all tea was inspected and bad tea rejected. The tea traders then instituted inspection on this side, and prevented the export of such as was found not to be up to the standard, and under these conditions the trade continued to grow in importance.

The total production of tea last year in Japan was valued at $6,740,977 an increase of $1,081,654 over the previous year, and the amount exported to the United States during eight month sending February, 1911, was 46,972,479 pounds, valued there at $8,058,364.

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GATHERING TEA

FIRING TEA

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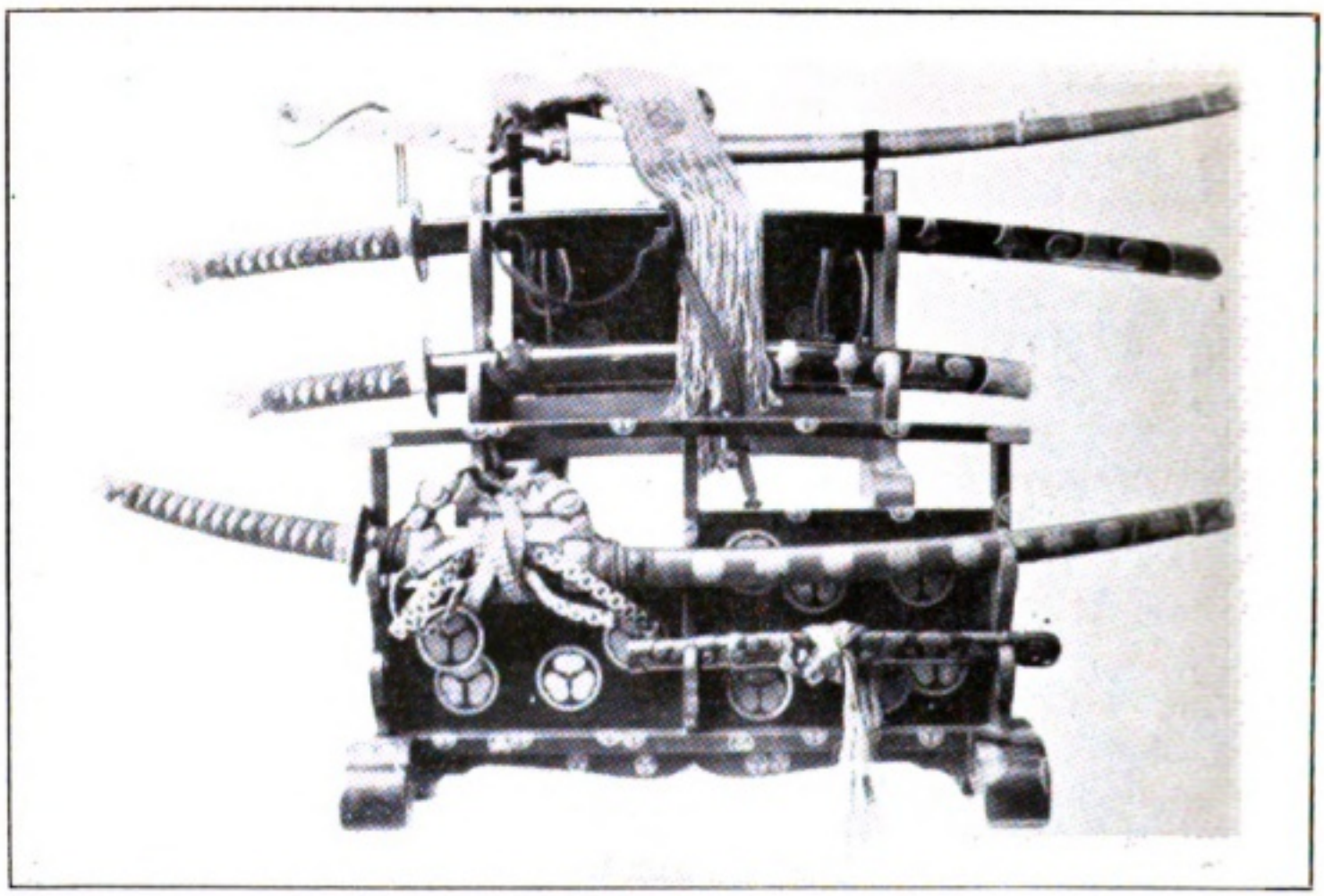
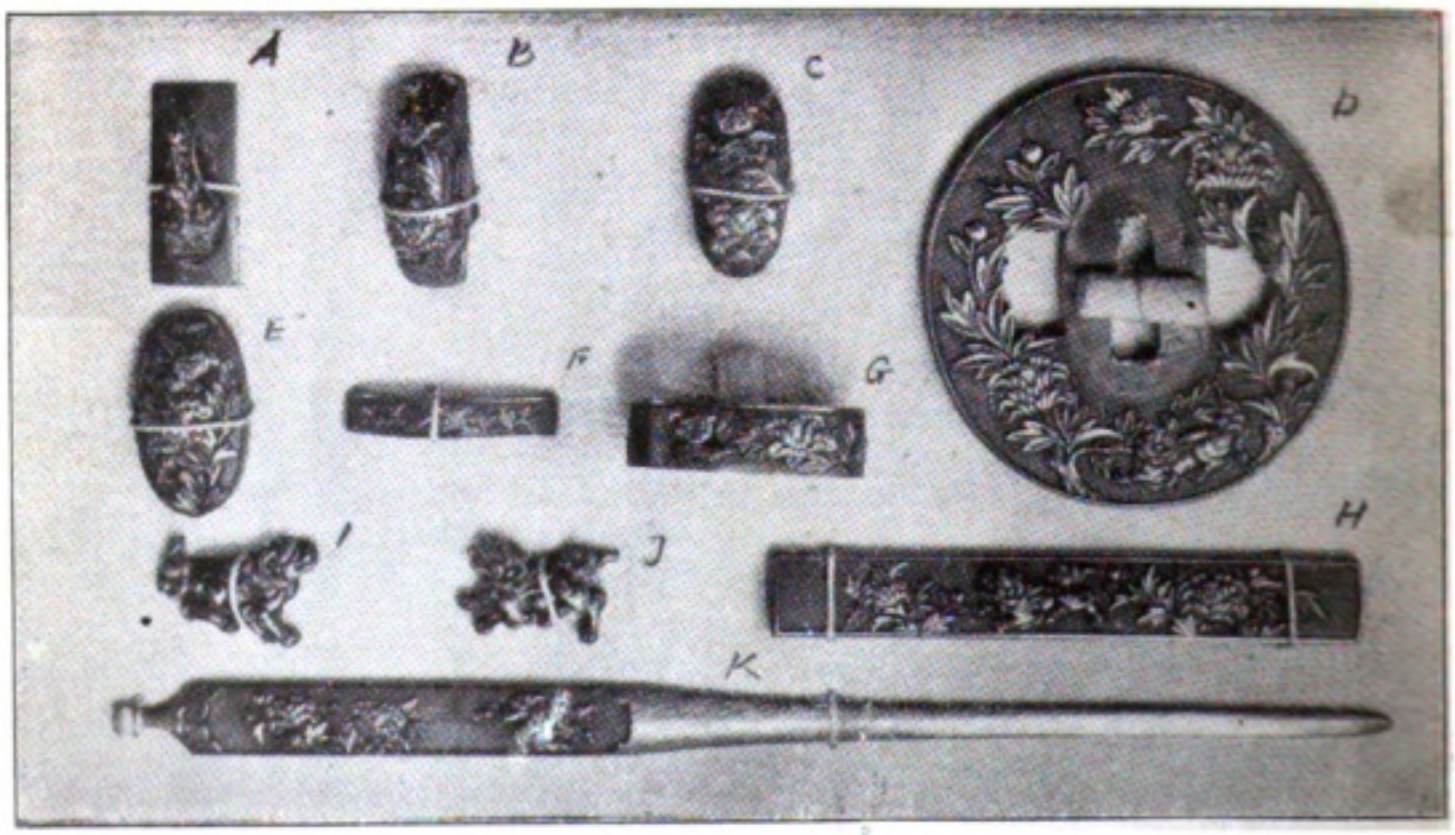


JAPANESE SWORDS

(*Imperial Museum*)

(From the top) Nobleman's dress sword. *Jintachi*, war swords, long and short. Another war sword, and *yoroitoshi*, a kind of dagger used in battle.



SWORD FURNITURE

(*Imperial Museum*)

a, b, *Soritsuno*. **c**, *Kojiri*. d, *Tsuba*. **e**, *Kashira*. **f**, *Fuchi*. **g**, *Kurigata*. h, *Kozuka*. i, j, *Menuki*. k, *Kogai*.

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SWORD FURNITURE

IT was, perhaps, the high esteem in which the sword of the *samurai* was held, that gave rise to the development of the ornamentation of the the various parts known as its furniture, the nomenclature of which varies in different kinds of swords, of which there were a number.

The two mostly under consideration are those which were worn in the girdle; the long sword, or *katana*, and the short sword, or *wakizashi*. Peculiar to the latter are two small instruments inserted in its scabbard on opposite sides; a knife called *kozuka*, and blunt companion piece, *kogai*, which served as a hair pin, but in time of war was put to the use of identifying its owner as the victor over a slain adversary into whose head he should thrust it. Also belonging to the *wakizashi* is the *soritsuno*, an attachment to prevent its slipping in the girdle.

Both of these swords have the guard, *tsuba*, a ring above the guard called *fuchi*, the cap, *kashira*, and a pair of *menuki* under the frapping of the kilt, which ensure a better grasp, all of which are ornamented. There are two other articles that complete the furniture, which may be mentioned, but they were not decorated; a plate, the *seppa*, and another small piece just below it, called the *habaki*.

The earliest examples of swords in Japan were taken from her dolmens, and show straight blades with wooden hilts and scabbards capped and banded with copper, bronze or iron, their history evidently going back several centuries before the Christian era.

Sword hilts were often made of oak, but the magnolia hypolenca, or *honoki*, was the favorite wood. The length of the hilt varied according to the size of the sword, from eight inches to one foot and several inches, its width being about two inches. At first it was wound with arrow root vine to afford a good grasp, then *menuki* made of whale bone were used, and later these were made of metal and became ornamental.

The *fuchi* was once made of horn and iron bound with metal thread, but owing to the horn cracking and the iron rusting, *shakudo*, a Japanese alloy, took their place. The guards used upon early swords were iron, usually pierced, and not unlike the type used down to the present century, when the feudal system was abolished.

The covering of the hilt came to be made of shark skin, the idea coming from China, at first being used only upon nobles' swords for ceremonial use, but afterwards became universal, which fashion has continued to the present day. The part used is taken from the shark's mouth because of its small grained but rough surface, which affords a firm hold upon the weapon.

The zenith of metal work in Japan was reached by the makers of sword furniture, the earliest masters in which belonged to the Miyochin family, and later ones to the Goto family, the first of which was Yujo Goto, of Kyoto (1460), and it has been said that he invented the relief carving for which he became so famous.

Three of the pieces which received ornamentation were considered essential, the guard, the ring and the cap; while the others were useful but decorative, the *kozuka*, the *kogai* and the *menuki*; and these latter received far more careful attention from the Goto masters, the first of which worked exclusively upon

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SMOKED EMPIMILLONE

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such objects.

Several mixtures and alloys were used in making sword mounts, the foundation of which was iron; but the master metal workers manipulated it as a painter does his pigments, in obtaining variety of tone and tint; and with the admixture of copper and silver, or gold, marvelous effects were obtained in color and finish, the beauty of the patina being unexcelled. From an intense black there were shades of violet, blue and brown, exquisite tones of grey, yellow and green and a wonderful, rich mahogany.

The Japanese names of the chief of the alloys are *shakudo*, an alloy of three per cent. gold and ninety-seven of copper, not in use until the tenth century; and *shibuichi*, usually one part silver to three parts copper, but many other variations have been used, for which there are distinguishing names, such as *sambo-gin*, with one part silver and two of copper, but the best is said to be that having six parts of silver to ten of copper.

The compounding of these two alloys, though a difficult achievement, was accomplished by Soyo, a great master, the result of which was a *shibuichi* of a dark color.

Gold and silver were used but sparingly; that is, they were usually employed for the decorative features only, the ground metals being iron, copper and the two alloys referred to, which after their invention were more used than iron or copper. Very few guards were made of gold, though sometimes the copper ones of the early period were plated with gold. Solid gold guards are found only upon the short dagger used by the *samurai*, and the elaborate ones treasured in some foreign collections were made especially for them and were never used upon a Japanese sword. Pure gold was used, however, for making *menuki*, and for ornament.

Very careful attention was paid to the production of a beautiful patina, and after the seventeenth century, exquisite satin surfaces were obtained that greatly enhanced the beauty of the object. But the process used by the old masters was held secret, each family having its particular method. But that used by modern experts, producing almost the same result, is on public record.

Inlaying was a mode of decoration much used in early times, for which gold, silver and brass were employed. Inlaying was called *zogan*. There were several methods; one, the same as that employed by the Chinese, by grooving narrower at the surface, known as true inlaying, or *hon-zogan*; another, by chiseling the design, usually a sort of diaper pattern, is called *nunome-zogan*, because of its likeness to linen mesh. Then there was hair-line inlaying, *kebori-zogan*, inserted inlaying, *kirikami-zogan*, and so-called ink inlaying, or *sumi-zogan*. All these were used with marked success by various artists, some winning special distinction for their work in a particular kind, as the Nagayoshi family, of Kaga, famous for groove inlaying, Hosono Masamori, noted for hair-line inlaying, and Ito Kiyoyasu, Shichibei (1700) and Kusakari Kiyosada (1790) celebrated for *sumi-zogan*.

Other forms of decoration used upon sword furniture may be spoken of under the general name of chiseling, and the Japanese terms for its numerous forms are: *atsu-*, *chiu-* and *usu-niku-bori*, being high, medium and low relief; *kata-kiri-bori* and *kebori*, incised work, or more properly speaking, engraving, of which the former, pictorial engraving, reached a perfection that has called forth the world's admiration; the latter was hair-line cutting. Another style once great-

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ly in vogue, the workers in which attained wonderful skill, was *maru-bori*, or full relief carving, in which the design was pierced through the plate, being perfect in detail on both sides; the cutting necessary for its perfection was termed *sukashi-bori*. Each of these had some celebrated master as its exponent, sometimes several.

Almost as much attention was paid to the background as to the design of the ornament, and these too had their special names among which may be mentioned *nanako*, or fish-roe ground; *ishime*, or stone pitting, and *jimigaki*, or polished. The *nanako* and *ishime* are again subdivided into several different kinds, according to the distribution of the dots or pits, and again each kind was particularly the achievement of some special artist.

Of the "Three Later Masters" of the Miyochin family, Nobuiye (1520) was the third, and his best examples show line engraving and low relief, and pierced work in some of which the ideographs of a verse of poetry are cut, and in one, a *torii*. In the guards made by Miyochin artists down to Nobuiye, the slightly rough surface is what is called *moyaski*, and is caused by the finishing process of producing the patina, the finest of which is of a mahogany color.

Though much had been done in the decoration of sword furniture previous to the time of the Goto family, under them it assumed new features and attained high developments, and it was during and after that period that the most superb work of the kind was done.

Yujo, the first of the Goto masters, died 1512, leaving many enthusiastic followers, one of whom Sojo (1620), became known as the second Goto master, succeeding whom there were many others; Joshin, 1540; Kojo, 1550; Tokujo, 1570, and Yeijo, 1660, together with the above named two, being the first six of the Goto masters, the last great expert of that family, the seventeenth representative, having passed away only in 1879.

The dragon and *shishi* were the favorite motives used by this great line of artists, especially the dragon, which at that time was given prominence in all art, and the Goto expressions and interpretations of this mythological animal seem to exhaust all imaginable forms it could possibly assume. They did, however, use many other designs. They also made a study of gold alloys, and valuable formulae have been handed down by them. So highly has the Gotos' work always been esteemed, that examples by them are counted of great value, and but recently a pair of *menuki* chiseled by a Goto master were sold for two hundred dollars.

While the Miyochin and Goto families were most prominent in the work of producing and decorating sword furniture, there were a host of others whose representatives did highly skilled work and who deserved probably an equal share of fame, among whom were the families of Umetada, Muneta, Aoki, Soami, Kuwamura, Mizuno, Kuninaga and many others.

All these had hosts of pupils besides their own descendants, swelling the list of workers in this line to an enormous length, many of the names being famous.

Yokoya Soyo, early part of seventeenth century, was noted for his work in *kata-kiri*, and Somin, his grandson, is regarded by some as Japan's greatest master in metal engraving, his floral work bearing great distinction. His work is perhaps more highly valued by Japanese connoisseurs than that by any other, and few examples have passed into foreign collections.

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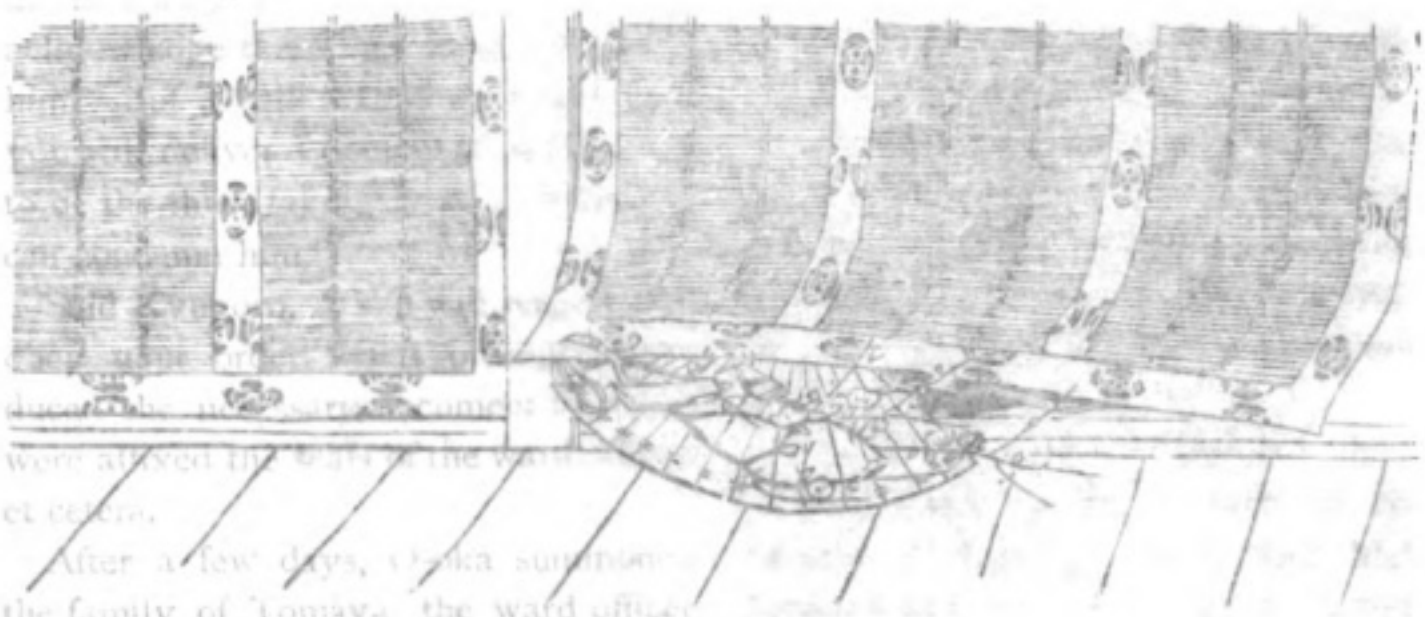
Many other artists of note contributed to the progress and development of the decorative work on sword furniture during the seventeenth century, the pierced work in full relief found on the guards of this period, being its most distinguishing and remarkable feature, the wide range of designs furnishing opportunity to the talents of floral and conventional artists, as well as to sculptors of animals and figures.

The eighteenth century developed a line of experts among whom Kikugawa Mineyoshi is famous for his carvings of chrysanthemums, Nara Yasuchika for his landscapes and Yasuyuma Motozumi, one of the greatest of the great, for his wonderful Chinese mythological figures, sculptured in *shibuichi*. At this time also several families not previously known in the work came upon the scene and supplied artists in sculptured sword furniture who carried the art to its greatest height; notably the Hamano, the Iwamoto, the Omori and the Okamoto families.

Kashiwaya Nagatsune (1750-1786), one of the most famous exponents of this class of sculpture, worked in both *shakudo* and *shibuichi* and employed a wide range of subjects, which he handled with consummate skill. His work was so much appreciated that he received a title from the Court at Kyoto.

The nineteenth century was one of extraordinary activity in this line of work, the latter half furnishing the best specimens many of which are now treasured in foreign collections. Famous among its names are Ichijo and Natsuo, of the Goto family, and Masatsune and Koretsune of the Ichiguro family.



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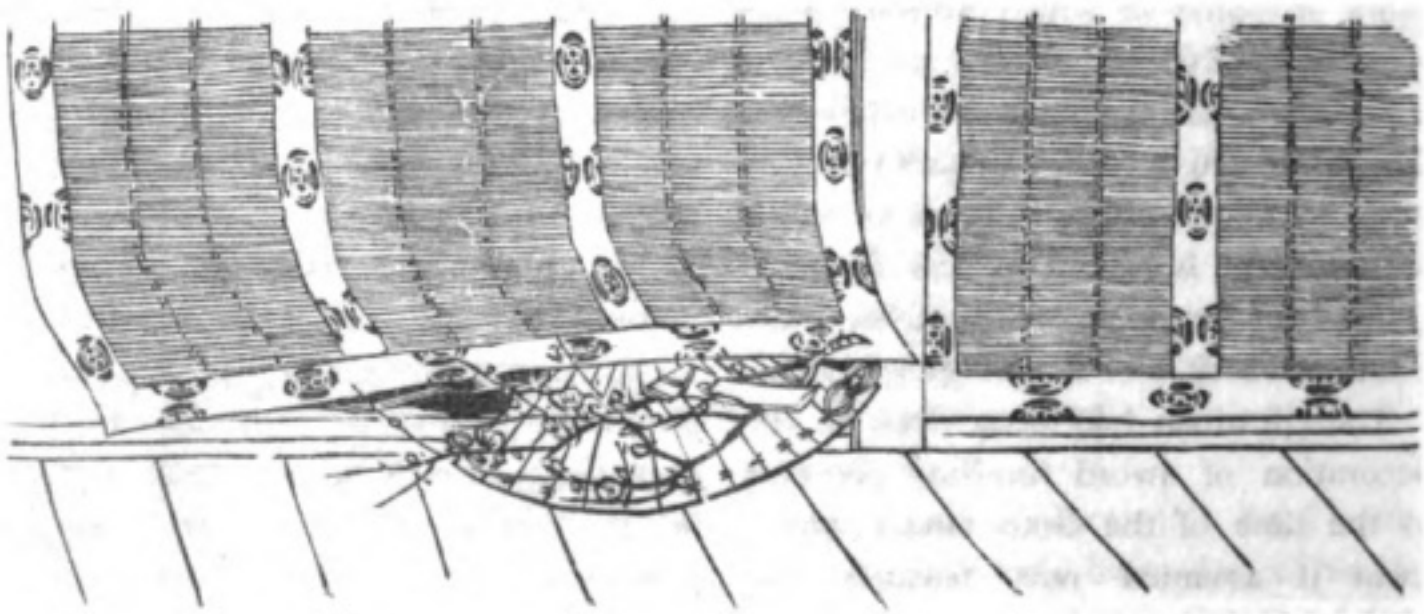

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O-OKA STORIES

THE INNOCENT MAN

A MERCHANT in Honkokucho, named Kyugoro Tomaya, missed fifty *ryo* from his shop and searched everywhere for the money, but without success. All the members of his family told him they were ignorant of it, but somehow they suspected Chusuke, the clerk, and accused him openly, abusing him severely. He stoutly denied any knowledge of the theft, but his master carried the complaint against him to the civil court. "There is no mistake about this man being the thief," said Kyugoro, "and as he confessed not the truth, I bring accusation against him."

O-oka inquired particularly into the cause of the accusation, and said, "If there is no proof that this man stole the money, although you, the master, think he is surely the thief, if he does not acknowledge the crime, I can not punish him. But I will examine him, and if you will deliver a document stating him to be the thief, taking it as a witness, I can condemn him."

Said Kyugoro, "We will respectfully obey your order," and promptly produced the necessary document to which were affixed the seals of the ward officer, et cetera.

After a few days, O-oka summoned the family of Tomaya, the ward officer and all concerned, and said, "As Chusuke, accused of stealing the money which Kyugoro, the master of Tomaya, lost on a previous day, refuses to admit his guilt even upon being tortured, I condemn him upon the testimony in the document presented by Kyugoro. So understand!" The complainants expressed their satisfaction and thanks, and withdrew from the court.

After many days had passed, Kyugoro, the ward officer and the others were again summoned before O-oka who said, "I recently had put to death one Chusuke whom you solemnly accused as a thief; but now another man confesses to have stolen the fifty *ryo* from Tomaya's shop, and since you caused an innocent man to be punished, you must now pay the penalty with your own heads, and obey the law of the court of justice."

Trembling and white with terror they prostrated themselves weeping and pleading repentance that they had brought an unjust accusation.

"I feel pity for you," said O-oka, "and on condition that you pay a large sum of money, I shall cause Chusuke to revive and return him to you, instead of sending you to the executioner."

Hearing this, all rejoiced greatly, and thanked O-oka gratefully.

"Now here is Chusuke, and since he suffered for a crime of which he was innocent, you are ordered to give him as much money as it will take to provide for him comfortably during his whole life."

FOR THE SHOGUN

O-oka was paying a visit to the *Shogun* Yoshimune, when that high dignitary said to him, "You are a wise man, of whom there are but few to-day, and I have always admired the decisions you render. Can you judge a very difficult matter for me?"

O-oka respectfully replied, in self-depreciating terms, "Although I am a stupid fellow, I shall solve the problem, depending upon your authority."

"It shall be so," said the *Shogun* and he passed a petition, which he held, to

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O-OKA STORIES

THE LAWGIVER'S WAY

[illegible] Kyogoku, [illegible] city [illegible] and [illegible] money, but within [illegible] the family told him [illegible] ignorant of it, but somehow [illegible] Chinai, the clerk, and [illegible] him quietly, showing him severe [illegible] He scarcely denied any knowledge [illegible], but his manner carried the [illegible] impression that to the civil court [illegible] "I do not blame you at this moment [illegible] the thief," said Kyogoku, "and as [illegible] not the truth, I bring [illegible] against him."

[illegible] impressed particularly by the [illegible] the accusation, and said, "[illegible] no proof that this man stole the [illegible] money, although you, the master, think [illegible] is merely the thief if he does not [illegible] the coin, I can not punish [illegible] I will compare him and if [illegible] a warrant [illegible] him."

[illegible] Kyogoku, "We will respectfully [illegible] order," and promptly procured the necessary document to which [illegible] the official of the ward office [illegible]

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[illegible] "I recently had occasion [illegible] a [illegible] for money, but within [illegible] the family told him [illegible] ignorant of it, but somehow [illegible] Chinai, the clerk, and [illegible] him quietly, showing him severe [illegible] He scarcely denied any knowledge [illegible], but his manner carried the [illegible] impression that to the civil court [illegible] "I do not blame you at this moment [illegible] the thief," said Kyogoku, "and as [illegible] not the truth, I bring [illegible] against him."

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[illegible] "I [illegible] the [illegible] [illegible]"

"[illegible] [illegible] [illegible] [

O-oka, who examined it carefully and saw that it was a matter which he could not pronounce upon at once, but said, "I shall decide the matter before your eyes."

At his immediate answer the *Shogun* smiled and asked, "Let this be the court; I am a plaintiff, Okubo a defendant; try the case at once."

"I shall respectfully obey your orders," replied O-oka, "but I humbly beg your pardon to offer that you, the petitioner, must sit on the lower seat, and I, the judge, on the upper, or how shall I exercise my office?"

"Your word is reasonable," said the *Shogun* "you shall sit on the upper seat, and I on the lower." And accordingly they changed places.

The judge now looked at the petition and demanded, "What man are you who make such a difficult suit?" And when he looked at the *Shogun*, who made no reply, but put his hands upon his knees, he reprimanded in a loud voice, "When you are in the court of the Empire, why are you putting your hands on your knees? You are an audacious fellow! Put your hands down at once." And the *Shogun* complied.

"What person are you?" Asked the judge.

"I am a citizen of Yedo."

"But what is your name, and why did you not write it upon the petition? Tell me your name." Yoshimune was somewhat embarassed, but O-oka persisted, "Tell me your name at once."

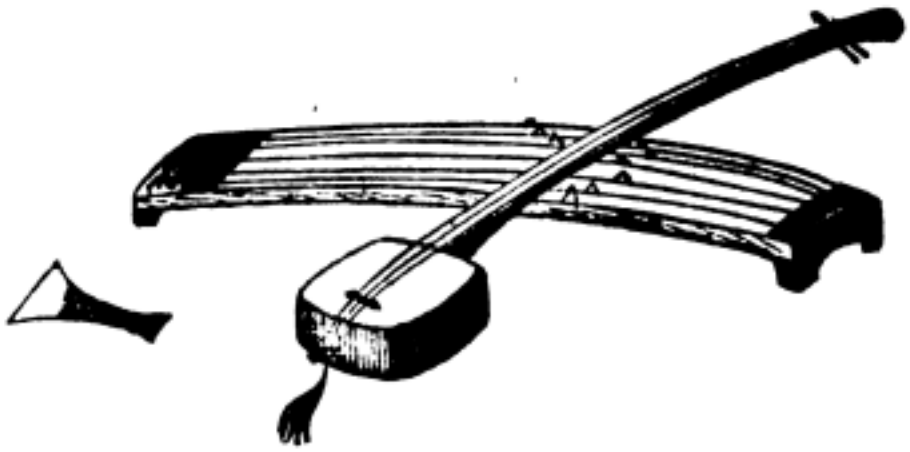
"It is called Yedoya," said the *Shogun*.

"That is a house name," called the judge severely, "what is your real name?" The *Shogun* faltered in announcing his true name. Then said the judge, "It is unbecoming that being only a citizen, you are wearing a coat which bears the *Shogun's* family crest, and clothing made of fine silk. Although I ought to imprison you, to-day I will allow you to withdraw, and will summon you again on a future day." And he immediately left his high seat, and bowed humbly before his lord saying, "I am full of fear."

"You have not judged my suit," said the *Shogun*, "but have said other things. What is the reason?"

O-oka replied humbly, "Often have I met with just such difficult cases, and not being able to judge them forthwith, made observations upon the plaintiff's defects, as I have remarked upon your name, coat, et cetera, allowing myself time to carefully weigh the real matter in question."

The *Shogun* was pleased and said, "You are a man of great wisdom, and even Fujitsuna Aoto, in the olden times, was inferior to you."



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FROM THE JAPANESE PRESS

GRAVEYARDS IN TOKYO

THE question of graveyards within the limits of Tokyo city is beginning to attract much attention. In the year of 1903 it was determined that the removal of all cemeteries outside the lines of the city should be encouraged, the method of encouragement being to present to the various temples the fee-simple of the land where the city graveyards originally stood. It was estimated that the selling-price of the land thus obtained would much more than suffice for the purpose of the corresponding area of cheap land in the rural districts and for the removal of the temples and graveyards hither. Fifteen hundred cemeteries were in question, and the area from which cemeteries have been removed during the past seven years aggregates 20,000 *tsubo*. There remains, however, a total area of 280,000 *tsubo*, and it is calculated that to remove all these cemeteries and the attached temples would cost eight million *yen*. On the other hand the sites thus made available within the city would be worth fourteen million *yen* at the moderate estimate of fifty *yen* per *tsubo*. The Tokyo municipality is anxious to see this work accomplished before the fiftieth year of Meiji (1917), and there is talk of establishing a special system of finance to provide funds.

The "Japan Mail."

THE TOKYO FINE ART SCHOOL

The school-building of the Tokyo Fine Art School in Uyeno Park which was destroyed by fire recently will be reconstructed at a cost of 120,000 *yen*.

JAPANESE ABROAD

According to investigations made by the Foreign Department at the end of 1909, the total number of Japanese subjects residing in foreign countries was 278,676, men being 199,413 and women 79,263. First stand in the list was Honolulu with 65,760 Japanese people, next Kwantung with 55,487 and then the United States of America with the figure of 53,361.

THE UYENO LIBRARY

According to official returns the Imperial Library in Uyeno had 18,704 visitors last month, and the number of books lent out was 85,914.

FOREIGN TOURISTS TO JAPAN

The total number of foreign tourists who visited Japan during last year was 17,283, showing an increase of 260 as compared with those of the year before last. There were 5,730 Chinese, 3,870 Americans and 3,161 Englishmen.

The Yorozu Chōhō.

ARMY STATISTICS

A pamphlet recently issued by the War Office contains interesting information on the result obtained last year in regard to the conscription of new recruits. According to the statistics given in the pamphlet, the total number of youths of conscript age last year aggregated 551,-924, showing a decrease of 17,373 as compared with the preceding year. Of this number the postponement of enlistment was granted to 684 (showing an increase of 61 over the figure for the preceding year) for the reason of "dif-

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DIZZIEST VIEWS

According to investigations made by the Foreign Department at the end of 1907 the total number of Japanese subjects residing in foreign countries was 512,252, showing an increase of 3,000 as compared with those of the year before last. There were 2,250 Chinese, 3,850 Americans and 3,101 Englishmen.

— *Jiji Tokyo Shimpo.*

AKIYA STATISTICS

A pamphlet recently issued by the *Navy Office* contains interesting information on the result obtained last year in relation to the consumption of war materials according to the statistics given in the pamphlet, the total number of kouku of consumption of 12 cm. and smaller was 2,127,000 and the number of kouku of consumption of 12 cm. and larger was 1,000,000. The total number of kouku of consumption of 12 cm. and smaller was 2,127,000 and the number of kouku of consumption of 12 cm. and larger was 1,000,000. The total number of kouku of consumption of 12 cm. and smaller was 2,127,000 and the number of kouku of consumption of 12 cm. and larger was 1,000,000.

— *Yorozu Chohoku.*

THE CAPTO TUNNEL

According to official reports the tunnel being tunneled in Capto had reached a depth of 1,000 feet, and the number of people that out was 2,000.

FOREIGN TOURISTS TO JAPAN

The total number of foreign tourists who visited Japan during last year was 17,828, showing an increase of 3,000 as compared with those of the year before last. There were 2,250 Chinese, 3,850 Americans and 3,101 Englishmen.

— *Jiji Tokyo Shimpo.*

OKUZAEMON IN TOKYO

THE division of gunzoku within the limits of Tokyo city is pending and to attract much attention. In the year of 1907 it was determined that the number of all concerns outside the limits of Tokyo should be encouraged, and the number of encouragement paid to the various temples the location of the land was the city. Encouragement paid to the temples of the land in the city should be encouraged, and the number of encouragement paid to the temples outside the limits of Tokyo city is pending and to attract much attention. In the year of 1907 it was determined that the number of all concerns

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ficulty in living"; to 83,602 (showing an increase of 1,208) in course of their studies in public and private schools; to 35,538 (showing an increase of 2,263) residing in foreign countries; to 26,678 (showing a decrease of 1,183) for the reason of disappearance, and in course of trial in Criminal Courts; to 696 (showing an increase of 262) for their serving terms of imprisonment, and to 8,383 (showing a decrease of 348) for sickness and some other reasons. Thus the conscripts who came up for physical examination altogether numbered 436,-343. Out of every 1,000 about 703 were passed, as *A* and *B* classes of the physical standard, the rest being put to *C* or lower classes.

Out of 43,000 conscripts who came up for physical examination 7,941 were found suffering from an eye disease (known as trachome) while the patients with venereal diseases numbered 11,593. With regard to height, those standing over 5 feet and 3 inches numbered some 323 out of every 1,000, showing an increase of about 9 as compared with the figure for the preceding year. The educational qualifications of the conscripts have shown great development of late, but there were about 43 in every 1,000 who are ignorant of the there r's. The attempted evasion of conscript duties is most conspicuous amongst those who have received higher education. The non-attendants at the conscription examination with good reasons numbered about 2,000 last year, showing an increase of 416 as compared with the preceding year. Contrary to the above phenomenon, the number of those volunteering for enlistment showed a steady increase. These volunteers numbered 3,437 (of whom 2,227 were enlisted), showing an increase of 466 over the figure recorded for the preceding year. *The "Japan Mail."*

IMPERIAL DECORATION

Mr. J. Russell Kennedy, of the Associated Press who was recently decorated by the Emperor with the Third Class order of the Sacred Mirror, has another mark of appreciation shown him for his fair and impartial work as the representative of one of the greatest news agencies of the world. His Japanese colleagues composing the *Shunjukai*, (the Press Association of the city), voted a resolution in form of a brief address to Mr. Kennedy highly appreciating his good work in cultivating better understanding between Japan and the United States.

The address is practically an endorsement by his colleague of the appreciation in which his services are held by the Court and the Government.

So far, there have been only three foreign journalists here who have been honored with so high classa decoration as the Third Class to begin with, namely: Captain Brinkley, of the *Japan Mail;* Mr. Cockerill, of the New York Herald, who was here immediately after the China War, and Mr. J. R. Konnedy, of the Associated Press.

The Tokyo Nichi Nichi.

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Long Roll of Landscape Painting, by Sesshu.

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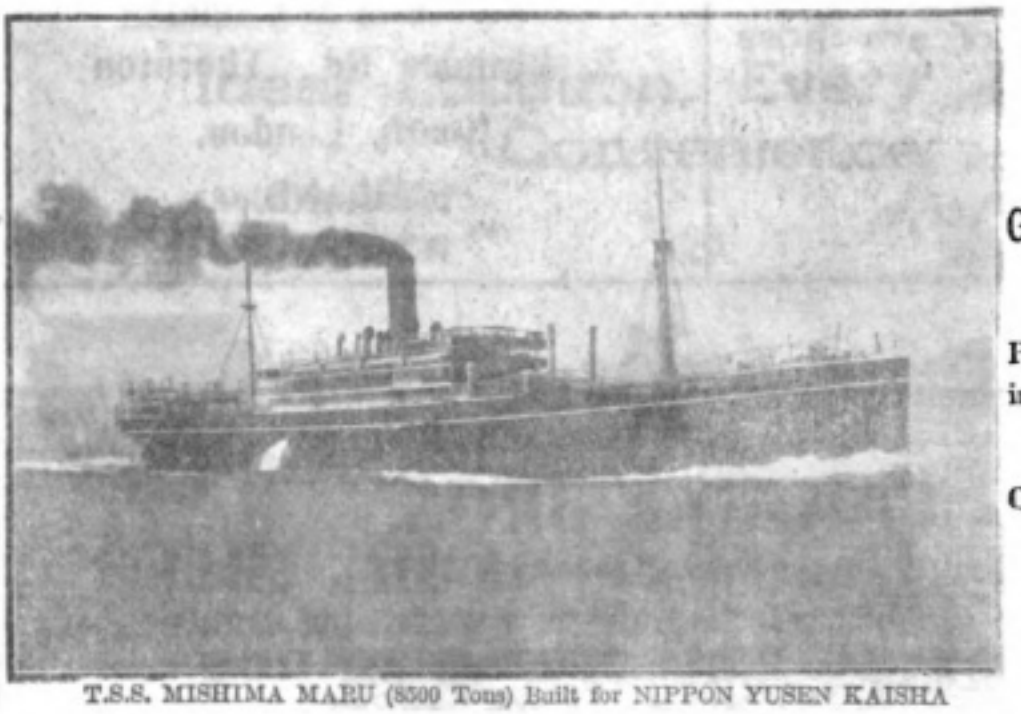

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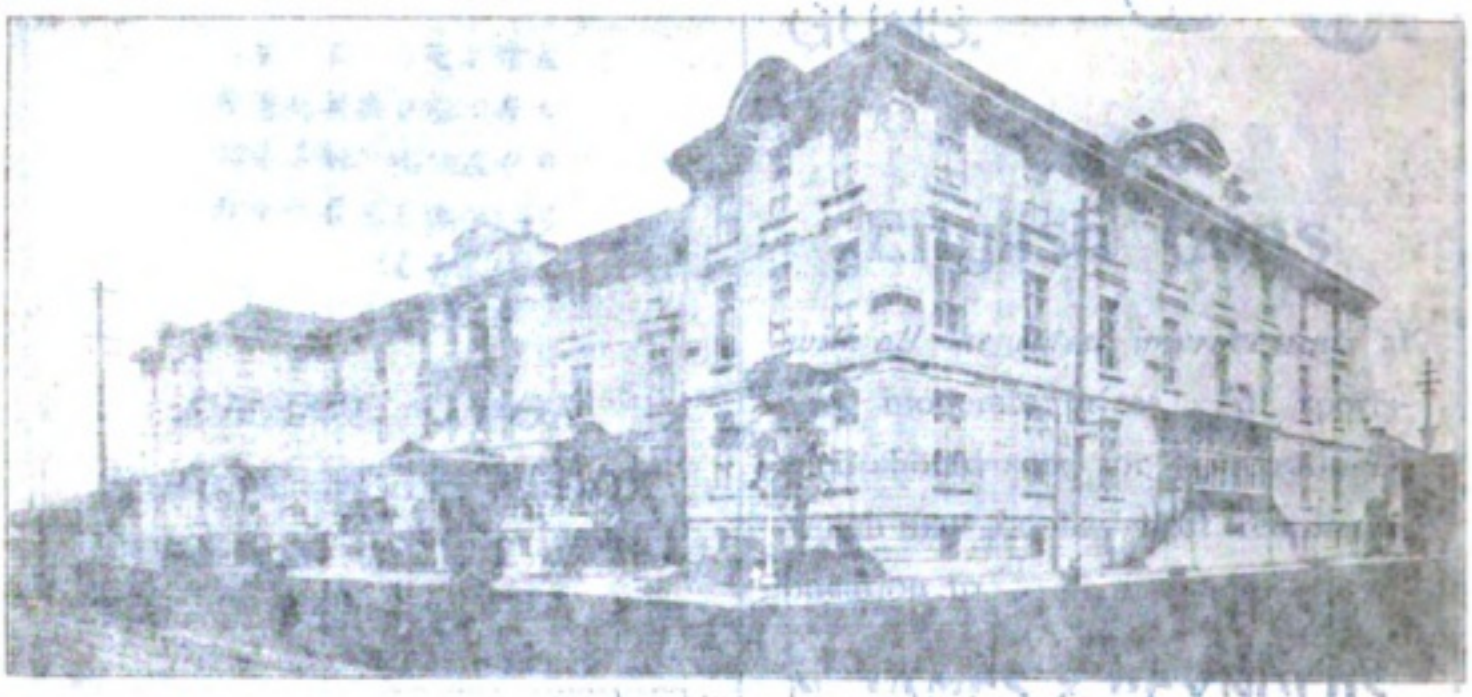

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質纖維にして、天然絹絲なることを知り得べし。

人造絹絲の染色法　人造絹絲が法品として初めて市場に現はれたる當時は之が染色法は甚不完全にして、色相の平を缺きたるのみならず大に絲質を損傷せり、人造絹絲の染色は天然絹絲の夫れに比し甚困難にして、染色浴槽の温度若し過度に失せんか直に破壞的作用を受けて强力を著しく失ひ其の重力すら支持する能はざるに至る、尙各種人造絹絲は各特性を有するを以て、同一の狀態又は染料を以て處理する能はず、從來人造絹絲は染色に關する幾多の試驗成績發表せられたれども、臨機の處置を要し之にのみ信賴し難き場合尠なからず、されば之が染色を完全になさんとせば先づ幾多の經驗を要す。

人造絹絲の染色に用ひらるゝ色素は次の三者なりとす。

(イ)「ダアイアミン」或は直接色素

(ロ)鹽基性色素

(ハ)硫黃質色素

以上三者の何れに依るも加熱の際は間接蒸氣を以てするを可とし、直接蒸氣により間歇的加熱をなさば色相の不揃を來すのみならず種々なる弊害を醸生し易し、尙人造絹絲の染色の際は少量宛漬浸するを要し、天然絹絲の如く多量をなすは甚危險なり、往々色素を投入する際の不注意よりして、染料の不溶解の粉末浮遊して絹絲に班點を生ることあり、是れ染料は各其溶解の度を異にするが爲めにして、之等は濾過によりて避くるを得べし。尙其他注意深く取扱ふと否とは直ちに染色上の結果に現れ來るや勿論なりとす。

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以上[illegible]に付[illegible]試験の結果[illegible]

（へ）技術的の案

（ロ）經濟的の案

（ト）[illegible]新に負擔[illegible]案

とす。

人造絹絲の染色に用ひらるゝ色素は次の三者なり

[illegible]に於ては[illegible]の[illegible]を要す。

[illegible]絲と[illegible]なるを[illegible]之か染色を完

[illegible]染色せる[illegible]の[illegible]を要して之れの

[illegible]なす、若し人造絹絲を染色に調する[illegible]の研究

[illegible]なるを以て、同一の染料又[illegible]を以て[illegible]

[illegible]するに至る、即ち各種人造絹絲は各染色性

[illegible]を選びて[illegible]の能力を有して[illegible]

[illegible]て、染色溫度の[illegible]せば適當に

[illegible]、人造絹絲の染色は天然絹絲の染色に比して困難

で、色相の合せ難きものあるを以て大に經驗を要し

[illegible]現在に於ける當業者は之か染色法に就て不完全にして

人造絹絲の染色法　人造絹絲は製品として販賣さ

[illegible]に加工して、天然絹絲なることを[illegible]

なるなり。

難なる[illegible]は[illegible]に[illegible]の[illegible]

は新[illegible]は[illegible]へる[illegible]へし、而して[illegible]

原料は各種類の[illegible]を[illegible]する[illegible]して、[illegible]

の[illegible]して[illegible]の[illegible]せることあり、[illegible]

色素を[illegible]の不[illegible]して、染料の不[illegible]

して、天然絹絲の[illegible]の[illegible]

質し、而して人造絹絲の染色の[illegible]

色相の不調和を來すことなく[illegible]

するを[illegible]して、[illegible]

その他

[illegible]

人造絹絲に就て

[illegible]

人造絹絲の特徴[illegible]價格の天然絲

柄なり。今や各國商工業者の方針は、自國の原料は自國に於て製造加工し、自國の商人及船舶に依りて直に消費者に提供せんとする所謂商工業的帝國主義とも稱すべき傾向なるは更めて云ふを須ひず、然るに現下に於ける原料銅の輸出は恰敵人に糧を與ふるの有樣にて、一般商工界の國際的競爭の方策に添はざるや明かなり、されば本邦製銅業者は最近綿逸諸工場に於けるが如く營業及研究に用意周到なる組織を用ひ、輸出原料銅を利用して悉く製造加工するに努め尙足らざるに至らば進んでは原料を海外に仰ぎ、以て東洋各市場を我勢力範圍に移すと同時に、此種製品の輸入を杜絶するの工夫に出でざるべからず、之を本邦紡績業の成功等に鑒れば原料を多く邦內に有するもの更に一段容易なるものなくんばあらざる也。

人造絹絲に就て

人造絹絲の特點　として擧ぐべきは價格の天然絹絲に比し遙に低廉なると、甚美なる獨特の光澤を有すとにありて、一時的裝飾用としての組物類、又は「りぼん」類には最も適し、此れ等の方面には天然絹絲を使用するよりも寧人造絹絲大に勝れり。

人造絹絲の鑑識　人造絹絲を天然絹絲と區別する最完全なる方法は顯微鏡檢査にして、天然絹絲は平滑にして圓筒形纖維、罷謨質を以て相固着すと雖、人造絹絲は表面不規則にして原料塊たりし時、器械的操作を受けたる證として數多の溝渠あり、且燃れ橫斷面は數多の氣泡を存するを視るべし。尙化學的鑑識は淸淨なる且乾きたる試驗器中に供試品の少許を入れ、「アルコホールランプ」にて加熱し、之より昇騰する蒸氣中に靑色試驗紙を入れ、若し赤變せば酸類を含有するの證にして人造絹絲なるを知り得べく、若し角を燒けるが如き臭氣を發散せば是れ動物

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れば直徑は著しく增加し、高さは却て減少したるを見る。

二、熔銅用反射爐は、一般に其容積の大なるものを用ふる傾向にして、其最大なるものを使用せるは米國「クロノム」工場なり。同工場處用の反射爐は、一回の裝入銅二百米噸のものを使用せり、而して其他の「マルチブル」式分銅工場も漸次同大のものに改造せられつゝあり、

三、電氣分銅に關する方法として「マルチブル」式と「セーリース」式との比較優劣に付ては專門學者間に議論あれども原料の品質及地方の事情により採擇すべきなり。

第四　歐米貿易上本邦銅業者の採るべき方針竝に要訣

本邦に於ける產銅額は生產に對する新鑛脈の開掘其他の原因に依り比年產出額の增加を示し、內地消費額の增加せるにも拘はらず、海外輸出額も自然に增加しつゝあるが如し。又淸國其他東洋市場の原料銅需用が減少すれば歐米への輸出は其價格の如何に拘はらず增加するは必然の趨勢なりと言はざるべからず。然るに歐米諸國の銅製品業を見るに却て東洋市場を目的とする特種品の製作に從事するもの少からず、英國バーミンガム諸製銅工場其他に於ける東洋向黃銅板製作の如き其一例にして、獨逸に於ける銅管、銅棒、眞鍮管、眞鍮棒の如き東洋市場に於ける需用は決して鮮少なりと云ふべからず、我國の如きも現に銅管及眞鍮管の輸入年々巨額に上り居るが如き有樣なるを以て、歐米銅工業者は我國より原料を買受け、商人仲介業者の利潤及遠洋輸送の運賃保險料を支拂ひ、更に歐米に於ける不廉なる勞銀及監督費を掛けて出來上りたる同製品が、再我國に逆送せられ、或は其他の東洋市場に於て我國製品を壓倒しつゝあり。斯の如きは適切に我製銅業の幼稚なるを證明するものにして、天與の利福を眼前に失ひつゝあるの狀は、邦家の爲め誠に痛心すべき事

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ール」は一部床下に在りて全体が高からざる様据付けらるゝが故、薄板の塲合には裝入側の職工も箸を出して他の側と協力し板を引取り居れるを見たり、

銅板の原料は尺五寸角若しくは二尺角厚さ四五寸のものを平型にて鑄造し、之を赤熱し横及縱に展延し中途一度「スケール」を削り取り後赤熱と展延とを續け四尺角の板として輸出せらる、其厚さは平方呎二十封度、二十一封度、二十二封度より三十封度迄東洋各地よりの注文多しと云ふ。

滊鑵車「ファイヤーボックス」用大銅板の製作は、水冷せる銅製の底と鑄鐵の枠より成る平型を以て正方形に鑄造せる厚さ七八寸、重量約一噸半のものより「レヴァーシング、ロール」にて赤熱の儘厚さ約二吋の板となし電氣「クレーン」を用ひて水に入れ冷却し壓搾氣鑿にて「スケール」を削り取り、再度赤熱の儘展延し厚さ五六分の板となして後蒸滊槌を用ひ擊ちて所要の形となすなり、上記「ロール」には「テーロール、ファレー」工塲のもの最多く用ひられ居れり。

第三　製銅に關する電氣工業に於て本邦に應用すべき技術上の要點

電氣分銅事業に關する技術は常に公刊せられ、本邦同業者に於ても常に其應用に腐心せらるゝの結果、特に改めて報告すべき顯著なる事項なしと雖、今二三の點を記述して未だ詳細知られざる處を補はんとす。

一、電氣分銅の原料たる「アノード」を製煉用「コンヴァター」より直接鑄造しつゝあるは、米國「グレードツオールス」工塲のみなれども、適當なる方法の下に於て本邦に應用し能はざるにあらず、同工塲は堅形「コンヴァーター」を用ふるを以て有名にして其形狀は幾度か改良せられ、現時は主として次の如き形のものを使用せり。

(1)9′6×8′6×13′ (2)12′×10′×13′ (3)12′×12′×13′

(1)及び(2)は橢圓形にして(3)は圓形のものなり是等を從來同工塲が使用したる7×7×14′形のものに比較す

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し、且微細の點に於て種々の差あるのみにして大体に於て同一原理に基くものなれば、之が詳細を省略して同機特許明細書の公刊物に讓らんとす、是等の方法による「ロール」にて製造せる管は水壓仕上機若くは「ドローベンチ」を用ひて製管の仕上をなすなり。

「エルモアー」式電氣分銅製管法は、獨逸「シュラーデルン」、英國「ヨークシャイヤー」等にて之を視察したるも其製造方法は決して複雜のものにあらず、隨て之を本邦に實行するは甚だしき困難を感せざるべしと雖、其最成功せる獨逸工場に於ても直徑六寸以下の銅管は「ロール」式によるを利とするの實況にして、大なる銅管及び製鑑用「ロール」の複銅の如き特種品に限らるゝを以て其販路狹少、本邦にては工場の經營困難なるべし、本式の製造費は百「キログラム」に對し約二十二馬克なりと云ふ、

東洋向黃銅板及銅板の製作、主として英國にて製出せらるゝものにしてバーミンガム「ムレッ」工場及スワンシー「キリャム、フォスター」工場にて視察せる處を略述せんに、黃銅の如きは總て容量約千斤の反射爐を用ひ、先つ銅を鎔解し充分還元作用を施せる後古黃銅を加へ爐の前に置かれたる「レードル」中に豫め熱したる亞鉛を容れ置き、之に右反射爐より鎔銅を流し出し、平型板「モールス」に汲み其表面に浮べる酸化物を掻き去りて冷却し厚さ約一吋の板を鑄造し、之を原料とす、此原料は更に反射爐に入れて燒鈍し、其熱し過ぎたるものは「ロール」の前面迄持ち來り「明ルミ」の消ゆる迄冷し、直に三回展延し長さ約三四倍となるや四尺程に切斷し、更に之を横に展延して約四尺角の薄板を作り更に「スリッター」にて一定の幅及長さに切斷し、燒鈍酸洗し回轉「ブラシ」にて表面を洗ひ乾燥し所謂印度行黃銅と爲す。

右「ロール」は直徑約二尺のものにして上段「ロール」の中心位迄の高さに「ロール、ハウシング」に取付けたる受けあり、其端に小「ローラー」を具へ「ロール」を通過し來る板を箸にて受けて逐り戻すに「ロ

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一所に合するも遠く半だに及ばざる程の大仕掛にして仕上り經費の如きも極めて低廉なり。例へば一定成分を有する九七物乃至九九物一ヶ月處理斤量五十噸以上に對する分銅費は減失量の代價を合せて、二千封度に付き金十五弗位にして、更に數量を增加するものに對しては多少經費を減ずるが如し、彼一ヶ月常に千萬斤餘に上る「アナコンダ」產銅に對しては反射爐製「アノード」受渡にて分銅費一米噸に付き金十弗にて長期契約せられたりと云ふ、而して歐洲に於ける米國電氣銅の聲譽は我國電氣銅の及ばざる所にして之れ一は數量の大差あるによるべしと雖常に遜色あるを免れざるが如し。

歐洲諸國は西班牙を除くの外皆自國の產銅を以て需要を滿たずに足らず、悉く原料銅を米國其他の海外に仰ぐものなれば、分銅其他の銅業の規模に付て多く見るべきものなしと雖、銅製品工業に付ては規模の壯大實に驚嘆すべきものあり、即電線、「ケーブル」線、銅板、銅管、銅捧等の製造は顯著なる發達を示せり、之が爲め英佛兩國に於ける國內消費原料銅は約二十萬噸に達し銅製品輸出額は九萬五千餘噸に達したるを以ても其事業の一斑を推知するに足らん。

第二　銅及眞鍮管其他銅製品の製造狀況

一、銅管製作には英國式「マンチスマン」式、「スチフェルニコルソン式、」「エルモーア」式等の方法あれども現今最普通に用ひられ且經濟上有利なりとせらるゝは、「マンチスマン」式にして、共に同方向に回轉せる二ツの「ロール」を筋違に置き原料たる棹銅を「ロール」の軸の方向より差入るれば棹銅は「ロール」に接して回轉さるゝと同時に左に進むに隨ひ漸次に「ロール」の直徑增し圓周速力增加するが爲め棹銅の表面次第々々に撚り延され「ソリッド」より管が出來上る仕組なり。

「スチーフェル、ニコルソン」式銅管荒引機は、「マンチスマン」式の改良法にして「ロール」の形を異に

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有すること少き礦石より乾式製煉により得たる銅を其型に鑄造して市場に出され居るものにして、現今にては最早やB.S.は方法の名にてはあらざるなり。英國にては常に電氣銅に比し多少高價に賣買せらる、是れ眞鍮製造用として電氣銅の純粹に過ぐるものに優れりと稱せらるゝによると云ふ、されど英國以外には彼の「レーキ」銅の高價を除くの外、斯の如き例を聞かざりし、尤銅板其他の柾斷力を增加するに、或分量迄砒素を含有するを利益とするは一般に認められたる事なれども、斯の如き特種の場合を除きては電氣銅の需用は減ぜざるべく、隨て其副產物たる金銀の採取と相俟て、電氣分銅業は依然として盛況を持續するは明なり。

現今世界に於ける主要電氣分銅工場は二十有數ヶ所にして、其大多數は「マルチプル」式を用ひ「セーリース」式を用ふるものは本邦日米工場を合せて僅に三ヶ所あるのみ、其數の上に於ては全体の八分の一を越へずと雖其製出量に於ては「セーリース」式電氣銅は世界全電氣銅の三分の一に上るべし。

今兩式の優劣に付ては、經濟上及技術上共に專門學者間に頗議論ある所にして、容易に決せざる所なるが、兩式の優劣は原料銅の品位にして或る一定性質を有する以上は、金利勞銀及職工の技能等の地方的情況に依て決定すべきものにして、方法に對する經濟上及技術上の根本的優劣を一般的に決することを得ざるに一致せるが如し。現に米國大西洋海岸地方に於ける「バルチモアー」、「ニコルス」兩會社の如き斯業の競爭激甚なる間に介在して十數年の久しき、「セーリス」式を用ひて常に擴張を行ひ社運益々隆々たるを見ても其一端を知るべきなり。

米國に於ける分銅業は、石炭代價の低廉なるに併せ處理數量の巨大なるとに依り、歐洲分銅業の遠く及ざる所にして、現に最近に至る迄我國輸出粗銅にして苟も分銅せらるゝものは、殆全部米國に送らるゝとも云ふべき狀況なりき、同國に於ける主なる同工場の規模は何れも我國に於ける全分銅工場を

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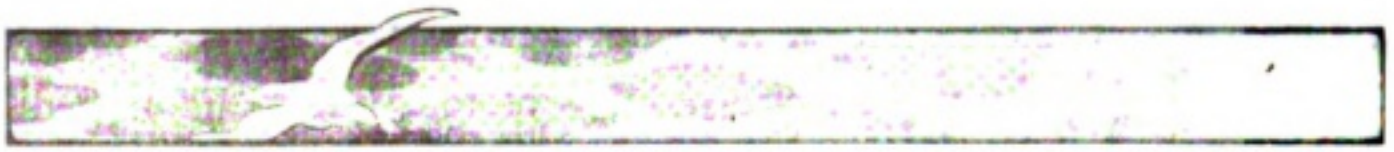

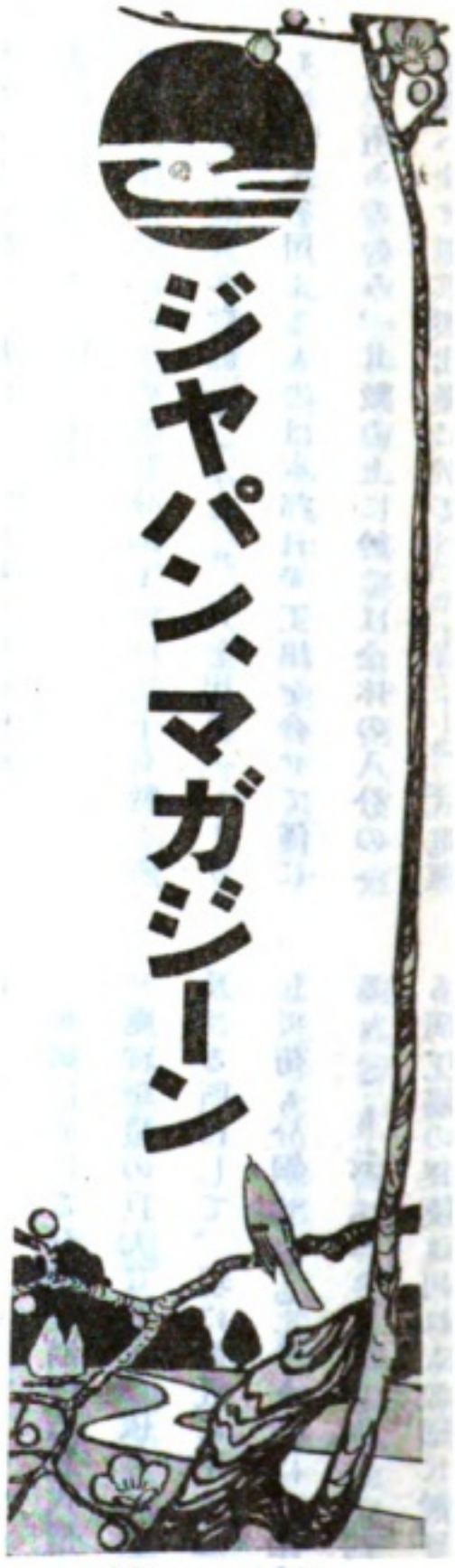

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第一卷
第十二號

歐米製銅事業の一般

第一　歐米諸國に於ける製銅事業の一般狀況

近時世界の產銅額は、其需要額に比して著しく超過し兩三年以來の世界的不景氣と相俟て價格の暴落を來し、今尙依然として沈滯の狀況を脫せず、爲めに昨年以來歐米主要產銅業者の間に、生產制限に關する協定成立すべきやの風說稍盛なりしが、斯る合同若くは協約成立の効果如何等の難問題は暫らく別問題とするも從來產銅費節減の方策として積極的に產出量の增加を計り、仕上り單位の低廉を來せるは延て大規模の貧鑛處理となり、米國チバダ及びユタ一地方露天堀新鑛山の盛況を視るに至れり。而して其製產費は、現今の低價を以てするも大なる利益を擧げつゝあるの實況なるが故に、前記合同により一時的顯象として若くは時に何等か大需要の突起により、銅價騰貴の事なきを保せずと雖、然らざる限り俄に其回復を期待し得べきにあらざるなり。

今銅製品工業の基礎たるべき製銅事業に付きて其一斑を述べんに、現今英國に在りて鑄造せらるべき「ベストセレクテッド」銅とは、有害なる不純物を含

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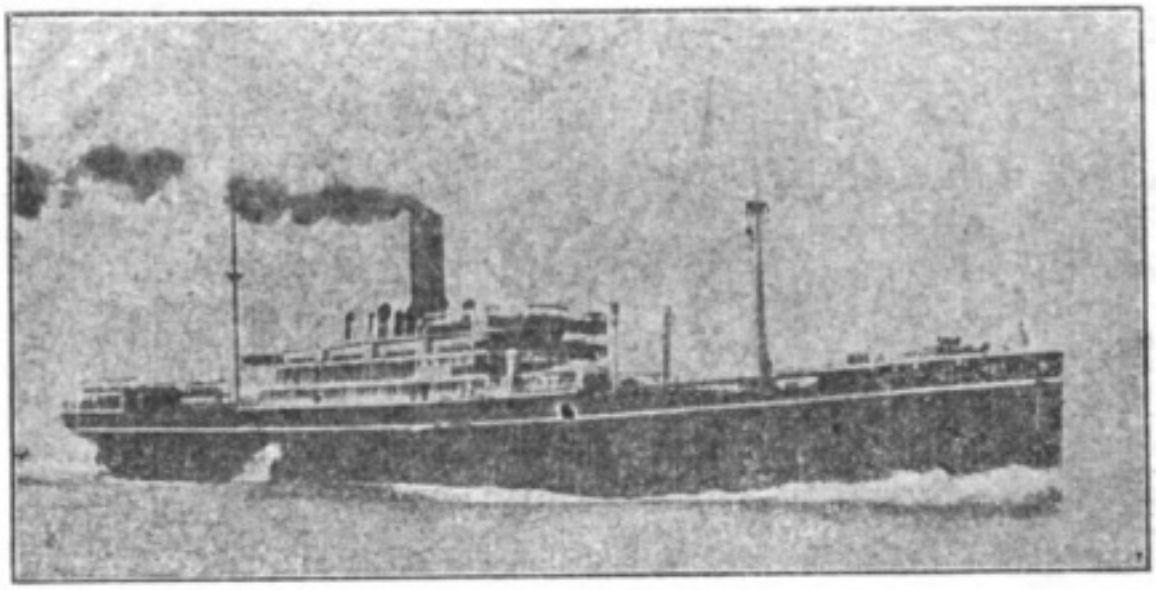

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